RELEVANCE OF THIRUVALLUVAR'S CONCEPT OF SPEECH, LANGUAGE, HEARING AND OTHER SENSORY STIMULUS INPUTS FOR A HEALTHY LIFE

Thesis submitted to Manonmaniam Sundaranar University, Tirunelveli
in partial fulfilment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

by

K. NARENDIRAN

(Regn. No: 5207)



MANONMANIAM SUNDARANAR UNIVERSITY

TIRUNELVELI – 627 012

MARCH - 2016

Dr.M.P.Ravanan
Guide
Speech Therapist and Audiologist,
Department of Ear, Nose, and Throat,
Government Tirunelveli Medical College
Hospital, Tirunelveli 11.

Dr.S.Alagesan
Co-Guide
(Prof. and Head, Dept. of Tamil and Syndicate
member [Retd.], Manonmaniam Sundaranar
University, Tirunelveli).Emeritus Prof. of Tamil,
Madurai Kamaraj University, Madurai.

CERTIFICATE

This thesis entitled, **Relevance of Thiruvalluvar's concept of Speech, Language, Hearing and other Sensory Stimulus inputs for a Healthy Life** submitted by K.Narendiran, Regn. No: 5207 for the award of degree of Doctor of Philosophy in Speech & Hearing of Manonmaniam Sundaranar University is a record of bona-fide research work done by him and it has not been submitted for the award of any degree, diploma, associateship, fellowship, of any University/ Institution.

Place: Tirunelveli.

Date:

Signature of the Co–Guide **Signature of the Guide**

K. Narendiran M.Sc.,

Regn. No: 5207,

“Sri Paadham”, No: 1 Kovaithirunagar,

Civil Aerodrome (P.O),

Coimbatore - 641014.

DECLARATION

I, hereby declare that the thesis entitled **Relevance of Thiruvalluvar’s concept of Speech, Language, Hearing and other Sensory Stimulus inputs for a Healthy Life** submitted by me for the degree of Doctor of Philosophy in Speech & Hearing is the result of my original and independent research work carried out under the guidance of Dr. M.P. Ravanan, Speech Therapist and Audiologist, Department of E.N.T., Government Tirunelveli Medical College Hospital, Tirunelveli as Guide and Dr.S.Alagesan, (Professor and Head, Department of Tamil Studies and Syndicate member[Retired], Manonmaniam Sundaranar University, Tirunelveli). Emeritus Professor-Tamil, Madurai Kamaraj University, Madurai as Co-Guide and it has not been submitted for the award of any degree, diploma, associateship, and fellowship of any university or institution.

Place: Tirunelveli.

Date: Signature of the Candidate.

ACKNOWLEDGEMENT

The rich wisdom of ancient Tamil community and their remarkable contribution of knowledge to mankind including literary creations like Thirukkural inspired me for this study capsule. While expressing my heartfelt thanks to God, Tamil language, and it's Scholars; a special mention needs to be made to at least a few of those helping hands who supported this research project at various stages.

I would like to thank Manonmaniam Sundaranar University, Tirunelveli for permitting this research study. I also express my gratitude to all those great educational institutions of my study: The Pongalur Kalvi Sangam at Pongalur, Govt. Arts College at Salem, All India Institute of Speech and Hearing (A.I.I.S.H.) at Mysore, and Memphis state University at Memphis, TN, U.S.A., for helping me to acquire academic knowledge, professional skills and research techniques etc. I express my sincere thanks to my Guide Dr. M. P. Ravanan, Speech Therapist and Audiologist, Government Tirunelveli Medical College Hospitals, Tirunelveli for providing important and effective guidance for this study and for motivating me at all stages. Dr.S.Alagesan, (Professor, Dept. of Tamil Studies and Syndicate member [Retired], Manonmaniam Sundaranar University, Tirunelveli) Emeritus Professor, Tamil Department, Madurai Kamaraj University, Madurai as my Co–Guide has given valuable guidance, many useful inputs, and the required research supervision for this project. I am indebted to both of their services and express my sincere thanks to them.

I thank my late Parents and Ancestors, all the family members of my Sisters, Wife and Daughters who offered support, care, assistance, and help at all required times and by all possible means. I recollect the good services of all my teachers, right from elementary level for imparting good educational skills; for teaching basic and

advanced professional knowledge, and for cultivating good social etiquette. On a special note, I thank my brother in law Mr. N. Gnanasekaran and Mr. D. Gopal, retired faculty member from Govt. Arts College, Salem for guiding me to choose this professional career. I thank Dr. N.Rathna, and Dr. S.Nikkam (former Directors) and all the staff members of A.I.I.S.H., Mysore, and the faculty members at Memphis state university, Memphis, U.S.A., who helped me in developing my professional education. I would like to thank the Rotary Foundation of Rotary International for their valuable help in enhancing my academic knowledge and social outlook. I cannot resist thanking Prof.S.Kameswaran, former director of IORL, M.M.C., Chennai and my teacher Mr. M. N. Vyasamurthy of AIISH, Mysore for imbibing research instinct in me. I thank Dr. B. Sampathkumar, former Principal of P.S.G.C.A.S. Coimbatore, Dr. D.Senthilkumar, Associate professor of Statistics P.S.G.C.A.S. Coimbatore, Prof. P. Jeyachandran of Vijay Human services, Chennai-14, and Mr. P.Paramasivan, Research Scholar, Department of Tamil studies, M.S. University Tirunelveli for their research and documentation support. I specially thank Dr. P.C.Raju of Saravana Surgery, Coimbatore.2 for all his concerns. I thank Mrs. S.S. Shankari and Ms.S.S.Srinidhi of Parvathy Sesha Mahal, Tirunelveli for their valuable support and help. With gratitude I thank all staff members of Manonmaniam Sundaranar University, my friends, professional associates, well wishers and the respondents of this survey research for their research support and help. I thank all the staff at different libraries for permitting me to utilize the resource material. I am grateful to all the administrators, staff, and students of 'KRISH' Special School, Coimbatore 14 for their assistance and help.

K.Narendiran

A NOTE ON ABBREVIATIONS

A.D.	anno Domini
B.C.	Before Christ.
BCE.	Before Christian Era.
CE.	Christian Era.
dt	date
Dt.	District
Dept.	Department
Ed	Edition / Editor
Int.	Introduction
Ltd	Limited
N.G.O	Non Governmental Organization.
No	Number.
P	Page
Pub	Publication / Publisher
Pvt	Private
Ref	Reference
Sl.No.	Serial Number
Std.	Standard
Vol.	Volume
Yrs.	years

.

CONTENTS

CHAPTER - 1

INTRODUCTION

"Whatever is truth will remain forever;

Whatever not, none can preserve"

- Swami Vivekananda (1900)

Communication: The highly evolved human social life requires greater degree of interaction between individuals, and we do that by communication. It is an important daily activity of human beings. Krishnamohan and Meera Banerji (1999:3) say that communication enables us to acquire, exchange, store, retrieve and process information. At times, we also communicate just for the purpose of social interaction. Communication takes place either by sending (encoding), or by receiving (de-coding) information. The exchange of ideas takes place at individual level by direct interface or through telecom services. Mass communication is also possible by using public address system, print and digital media, or through satellite services. Communication chain involves the sender, the listener and also the channel. The channel is determined by physical parameters and socio-cultural factors. Communication helps us to improve our personal, psychosocial, educational, vocational and economic activities. Since it improves intra-personal and inter-personal relations, our social adjustment can be positive and better at all levels. We may communicate verbally, graphically or by other non-verbal special modes of language.

Language: Language is an avenue for communication. In the book of Roberta Chapey (1986:7), Chomsky called language the human essence for maturity and advancement. Language is a complex function of thought symbolization by which each individual learns concepts and acquires the knowledge of the world. This

Knowledge acquisition is possible by good perception through sensory organs and by complex cognitive processes. A good thinking and the memory decides the outcome of cognitive skill. Our expression helps others to receive ideas and concepts. Any language has two attributes called 'form' and 'content'. The 'form' explains the system of rules that maintains phonology, morphology and syntax. The 'content' says about meaning, topic or subject matter of an utterance. The language comprises vocabulary, sentence construction and their functional usage for our daily activities. If one's anatomical structure, physiological functions and psychological status are normal and when the innate potential for language is well stimulated; his communication becomes refined and effective. The types and modes of language can be mainly classified as below.

Modes ⇨ / Types ⇩	**Primary** (Verbal)	**Secondary** (Graphical)	**Special**
Receptive	Hearing	Seeing images and Reading	Touch (Brail) Gestures
Expressive	Speech	Writing	Signs and gestures. Telegraphic code.

The speech and hearing skills are called the verbal language and it is the common modes of communication. Since verbal language is acquired even without any formal academic training, it is called the primary language. Reading and writing requires the structured teaching by a special curriculum and it is called the secondary language. Special modes are used by selected groups like persons with visual problem (Braille), or hearing impairment (Sign/ Gestures), or who know telegraphic codes.

Speech: Speech is one aspect of expressive language and is defined as the oral expression of established communicative system of arbitrary and conventionalized

acoustic symbols. Speech has the unique distinction as the species specific trait and makes man extraordinary. Speech output reflects the various conditions of the speaker like the structure and function of speech organs, his psycho-emotional status and other environmental conditions. So, it can be considered the index of one's whole personality. Normal structure and function of all organs of speech production like the respiratory / phonatory / and articulatory systems, adequate hearing, normal intelligence and conducive environment are the main pre-requisites for a good speech output. Speech in a child is said to start with the birth cry, and it passes through various other stages like reflexive vocalization, babbling, lalling and echolalia before it becomes true speech at one year of age.

The differential growth patterns in various languages: Though there are variations and differences seen in the language output of people across the world, all the above mentioned basic concepts are common for all languages. In the book by Howard S. Friedman et al (2006:456), Hockett says that every natural language ever studied is remarkably complex in its nature. But all these languages have many features in common which is referred to as 'Linguistic Universals'. Every language has its own identity and has individual growth pattern. In addition to the merit of the language, the conducive or adverse changes and variations taking place in political systems, socio-cultural aspects, and administrative setup which prevailed in different periods of historical times might have influenced the developmental growth patterns of various languages. The qualitative and the quantitative changes attained by a language, gives us an indication about the physical and moral progress or loss made by those people, their culture, their economical development, administrative set up and heritage etc. The literary maturity, its antiquity and the special features of that language can be the yardsticks to measure the proficiency of any language. In short,

the overall strength of any country, or the community, or the language can be understood from the depth of their literary contributions. Howard S. Friedman et al (2006:459) says that our language influences not only the way we say things, but even the way we think, understand and perceive the world. The specifics of our language not only determine how our thought is transformed into words, but also shape the very nature of our thoughts. Many languages have been in use continuously for so many years with rich literary output materials, but few other languages have vanished. It is really sad to note that some languages are on the verge of extinction.

Tamil language and its merit: Among all the languages of the world, "Thamizh" which is otherwise spelled 'Tamil' is one of the few privileged languages to have stood strong and tall for a very long period. It is still vibrant and has boldly withstood all the tests of time including internal and foreign invasions, and the subsequent pressure exerted on it, due to various other reasons. It is a Dravidian language that has got a glorious past and enjoys a powerful heritage. Because of its richness and traditional sophistication, its growth is continuous and can face any future challenges. Hart L.G. (2000) says, "…classical Tamil is considered as the source language of modern Tamil and Malayalam. Tamil language has been the touch stone that Linguists consult and work to understand the nature and development of Dravidian tradition and culture. Tamil language is ancient and authentically original in its form and content. This basic strength and its rich literary contribution itself show the traditional value of Tamil language. Tamil has its own works that are considered to be as sacred as the Vedas and that are recited alongside Vedic mantras in the great Vaishnava temples of South India such as Tirupati".

Tamil spoken areas: Though Tamil is mainly spoken by Tamil people in South India, it has also spread to many parts of the world. Wikipedia (2015: 1-19)

states, “Tamil is one of the twenty two scheduled languages of India. It has the official status in the Indian state of Tamil Nadu, in the Indian union territory of Puducheri, and also in Singapore. It is also spoken by people of north and eastern part of Sri Lanka. Tamil is a national language of Sri Lanka, and is spoken by significant minorities in Malaysia, Mauritius and by emigrant communities around the world.”

Antiquity of Tamil: Wikipedia (2015: 27- 38) says, “The earliest period of Tamil literature, Sangam literature, is dated from the 300 BCE – 300 CE. The earliest epigraphic records found on rock edicts and hero-stones date from around the 3rd century BCE. Tamil language inscriptions written in 1st century BCE and 2nd century CE have been discovered in Egypt, Sri Lanka and Thailand. The two earliest manuscripts from India, to be acknowledged and registered in 1997 and 2005 by UNESCO Memory of the World register were in Tamil. More than fifty five percent of the epigraphical inscriptions numbering about fifty five thousand found by the Archaeological Survey of India are in Tamil language. Tamil literature has existed for over two thousand years”. Hart L.G. (2000) says, “the greatest works of ancient Tamils, namely the ‘Ettuthogai’ and the ‘Pathuppattu’, date to the first two centuries of the current era. They are the first great secular body of poetry written in India, pre-dating Kalidasa's works by two hundred years. It is considered to have the oldest extant literature amongst other Dravidian languages.”

Tamil Literature: Hart L.G. (2000) says, “Tamil language, an independent source of modern Indian culture and tradition; has the unique, longstanding, intellectually rich and finest literature of the world. Tamil constitutes the only literary tradition indigenous to India that is not derived from Sanskrit. It is a treasure and has its own poetic theory, its own grammatical tradition, its own esthetics and above all a large body of literature that is quite unique in its nature. It has produced a lot of unique and

great literary works like ‘Tholkaappiam’, ‘Pathuppaattu’, ‘Ettuthogai’, ‘Pathinen-keel-kanakku’ etc which also includes Thirukkural”. Alagesan S. et al (2015) in his book quotes Subramaniam S.V where it is said, “Tholkappiam written in the third century B.C. is the first universal grammar in the universe. It has ‘Ezhuthu’, ‘Sol’ and ‘Porul’ athikaram (Chapters)”. Tholkappiam not only explains the language grammar like the production of speech, but also about sociological grammar. The classification of Tamil literature as ‘inner field-அகம்’ and ‘outer field-புறம்’ is considered unique and special. The inner field refers to personal aspects like love and intimate inter-personal relationship and is dealt in a subtle manner. The outer field indicates all other aspects like courage and the spirit to face dangers or challenges, ethical values, compassion, Philanthropy, social life, etc. Pope G.U., a great scholar, master disciplinarian and an ideal teacher called Tamil ‘a noble language’. He translated ancient Tamil works like ‘Thirukkural’, ‘Naaladiar’, ‘Thiruvachakam’, ‘Purananooru’, etc into English.

The classical status of Tamil literature: Tamil is the first Indian language that was given classical status by the Government of India in the year 2004. Hart L.G. (2000) says that the variety, subtlety, quality and profundity of its works, and their universality qualify Tamil literature to stand as one of the great classical traditions and literatures of the world. Tamil is of considerable antiquity and is one of the longest surviving classical languages in the world. He says that the quality of classical Tamil literature is such that, it is fit to stand beside the great world literature of Sanskrit, Greek, Latin, Chinese, Persian and Arabic.

Relevance of Tamil Literature: Tamil literature right from the ancient days has contributed very valuable works, and its contents are considered to have life and

relevance to modern times. Kapali Sastry T.V. (1983: 5) states, "… Even the well learned persons of modern times admit and say that the most ancient fancies sometimes startle us by their strikingly modern character, for insight does not depend upon modernity". Thirukkural is one of the many of Tamil literary contributions which can be considered as good examples for this statement. The marvelous Thirukkural has made Tamil language achieve greater standards and pride.

Thirukkural: It is an ancient Tamil literature which is also referred as Kural or couplets or verse. Thirukkural can be considered the true yardstick to know the perfect status, cultural heritage and the lifestyle of ancient Tamil community. Almost all facets of human existence are explored and illuminated by this great literature Thirukkural. It has had a glorious past and has firmly withstood all the tests of time till now. Murugan V. (2009: III) says that it has an universal application and can be considered as the priceless guiding light and gift of a classical literature to Tamil Language and to the humanity at large. As pointed out by Rajagopalachari C. (1969: XIII), Thirukkural is a work linked with the life of people in all aspects, and discloses the high degree of civilization in the truest sense. It helps us to live in a right way with wisdom, perfect health, enough wealth, prosperity and joy of peace. In short, with indispensable authority, it proclaims the ideal human life with high moral values and acceptable wealth. Kulandaiswamy V. C. (2005:113) says, "Kural is an essential part of the heritage, not only of the Tamil land, but the country as a whole. The book in a way also bears evidence to the height of civilization and culture as well as intellectual attainments that humanity reached nearly two thousand years ago". Thirukkural is one of the world's greatest monumental literary works and a famous classic poetic composition of great antiquity in the Tamil literature. Thirukkural has a total of 1330 couplets which are placed in 133 chapters with ten couplets in each chapter. These

poems deal with various aspects of human activities and the wide spectrum of information is given in the following three main sections in a condensed form.

- Righteousness / Virtue (அறம்) division with thirty eight chapters containing three hundred and eighty verses (couplets 1 to 380) discusses ethical living in private life.

- Wealth (பொருள்) division has seventy chapters containing seven hundred verses (couplets 381 to 1080). It deals with public matters including economy, wealth, state administration and politics which are beautifully woven with very profound nuances to form the soul of the magnum opus.

- Pleasure / love (இன்பம்) division has twenty five chapters of two hundred and fifty verses (couplets 1081 to1330). It discusses the nature and ethics of love and romance.

Each chapter has a specific subject topic and each of these couplets consists of only seven 'cirs' (Tamil words), with four 'cirs' on the first line and three on the second line. A 'cir' may be a single word or a combination of Tamil words. In Tamil "Kural" means poetic 'Venpa' verse with two lines. This short poetic output in a nutshell with high content value, makes Kural very special and unique in its expression. It has been translated into many languages and has continued to have great attraction to the best minds of the world right through the ages. Translation of a book like Thirukkural means translating a treatise par excellence from one culture to another. It is often felt that these translations are grossly inadequate and sometimes even misleading. Dr. Albert Schweitzer as quoted by Rajaram M. (2009: Int) asserted, 'There hardly exists

in the literature of the world, a collection of maxims in which we find so much of lofty wisdom'. Rajagopalachari C. (1947: XI) says that with the general acceptance, it is considered to belong to a period anterior to the second century A.D. It pre-dates the literature of other modern Indian languages by more than thousand years. Murugan V. (2009: III) said, "Thiruvalluvar is a well known ancient Tamil poet who lived about 2000 years ago". When we strictly follow the value added thoughts of Thiruvalluvar, otherwise known as Valluvar, even an ordinary man can achieve human excellence. Rajagopalachari (1947: XI) said, "Valluvar was one of those rare great men, whose broadminded spirit and vision rose above all denominations. His teachings cut across all the barriers like caste, creed, religion and time to make us feel as if they are meant for all, at any given time. It has a generalized approach of universal application without any prejudiced specific or localized interest. He also says that Thiruvalluvar's approach to moral doctrine is marked by a very thorough knowledge of human psychology including its subtleties. He diagnosed the problematic intricacies of human behavior and had a desire to help the imperfect men with practical hints in the natural struggle against evil". His prescriptions for godliness, ethics, morality and humanness are sagacious and practical to the core. Thiruvalluvar might not have contemplated the modern democracy, but his basic human approach makes his work best suited for any democratic government. The sagacious advice given by Thiruvalluvar to kings, ministers and even to the citizens of ancient Tamil Nadu still holds good for all sects.

Speech, Language, Hearing and Sensory inputs in Tamil Literature and in Thirukkural: Speech is considered to be an expression of thought in spoken words. Language is a systematic means of communicating ideas or feelings by the use of conventionalized signs, sounds, gestures or marks that have shared meanings.

Hearing is the process, function or power of perceiving sound, or the act of listening. The Sensory inputs convey the nerve impulses from the sense organs to the nerve centers of the brain. Sensation is the process by which sensory receptor neurons detect information and transmit it to the brain. Speech, Language, Hearing, Sensory inputs and other related topics are well explained in many of the Tamil literary works like Tholkappiam,Thirukkural,Aathichoodi, Nannool, Thirumandiram, Ilakkana vilakkam, Thonnool Vilakkam etc. Though on various occasions, many ancient Tamil literature and knowledge sources have focused their views on 'Speech and Hearing', only Thirukkural verses have been chosen for this study. The exclusive study of Thirukkural has been done to restrict the focus of research. Thirukkural has its special contribution for these subjects and have allotted two exclusive chapters to the highly complex human skill activities of 'Power of Speech(சொல்வன்மை) in Chapter 65' and 'Hearing / Listening(கேள்வி)in Chapter 42' (Pope G.U. et al 2010:90,136; Avvai Azhagammai M.P.1997:48). He has dealt with these two complex aspects of human skill in an extensive way. In addition to this, many other couplets spread over in various other chapters also speak directly or indirectly about different aspects of Speech, Hearing, Language, and Sensory-stimulation. Since, Thiruvalluvar has given Kural in a concise form, sometimes the general notions of Kural and his concepts are difficult to understand clearly. But still, a broader outlook itself has given us a great deal of information for our healthy life.

Relevance of Thirukkural for today's healthy Life. Shelley E.Taylor (2006:4) quotes the definition of World Health Organization for health as, "a complete state of physical, mental, and social well being and not merely the absence of disease or infirmity." Many use the term "wellness", to refer to this optimum state

of health. David Werner (1994 w7) in his book says that health is more than not being sick. It is the well being: in body, mind, and community. People live best in healthy surroundings, in a place where they can trust each other, work together to meet their daily needs, share in times of difficulty, help each other learn and grow, and live, each as fully as he can. Though we can do our best to solve our day to day problems, we have to remember that our foremost priority should be to help our community become a healthier and better place to live. On many occasions, ancient Tamil literature has focused much on the skills of Speech, Language and Hearing. Till now, no known modern scientific study has been done on them to bring it to limelight and within the purview of professional researchers. Even in other Indian languages, only few studies have been attempted on this line. Savithri S. R (1978:113) in her significant study done on this line said, "Sanskrit literature is rich and ancient, and has several references to Speech, Hearing and its disorders. But, young Speech and Hearing professionals of this country have not paid much attention to the literature in Sanskrit".This indicates that many of the present day Speech and Hearing professionals are still ignorant about the scientific information available in Indian languages. The professionals have failed to recognize the valuable knowledge of our ancestors. So, studies of this kind can definitely bring forth better ideas and concepts for our future growth. Though there are many great Tamil literary works which are considered to be highly relevant for today's social, moral, and healthy life; Thirukkural needs a special mention. Kulandaiswamy V. C. (2002: XV - XIX) says, "….in recent decades, attempts, though feeble, have been made to understand from the Kural, the social life of the Tamils of the period of Valluvar. From being a book which is confined to scholars and classrooms, Thirukkural has slowly emerged as a book that offers scope for research into the life of the people of his age". He also says,

"….scriptures, philosophical enquiries, great literary works and studies that dwell on the domain of human wisdom rather than human knowledge have the potential to sustain themselves and resist obsolescence. My task concerns an enquiry into the relevance of Kural today and the inherent factors that make it enduring. Kural was written nearly two millennia ago. Its author could have only written it standing on the shoulders of his ancestors; standing on the ground with all the environmental influences impinging on him, and soaring high into the sky, commanding a broader view, penetrating into and anticipating the future as far as his genius could have enabled him to. In spite of the immense changes that have taken place over a period of time, it is interesting that some concepts are free from the impact of contemporary influences and are still relevant. But it is not easy to prepare a whole text of 1330 couplets on so temporal a subject as 'The art of Living' and present it in a manner which still holds well. We hail those as sages or saints who almost intuitively show an insight into the nature of human society, a perception of its progress, an understanding of the permanent and the ephemeral, but how far can they anticipate the future?" Kulandaiswamy V. C. (2002: 30-32, 98,112) says, "…Certain things considered as part of good decorum in a society at a particular period, may not be accepted as such in the same society at a different period. He states that a good decorum is what the great men of the society lay down from time to time. He also says that in the state of knowledge that then exhisted, the statement might be substantially true. But today we cannot assume that what is contained in Valluvar's work is adequate and we have all that is needed to guide us in our life. If we approach the Kural with objectivity and an open mind, we will find that there are views here and there that are disputable and unacceptable. The Kural cannot be an answer to all the questions of today and tomorrow. We cannot also take for granted that every one of the 1330 couplets written

about 2000 years ago will be relevant and applicable today in letter and spirit. But there is nothing to be wondered at about such a situation”. In his forward message given by Gurusamy M.R.P. which is cited in the book by Aasaan G.V.K. (2008:4) also says, “Anybody has his right to accept or reject any idea–even the ideas of Thiru-k-kural.” So, to bring Thirukkural to the realm of scientific enquiry, an attempt is made here by this study. The main aim is to focus and highlight the amazing wisdom, scientific skill, intuitive capacity, and values which Thiruvalluvar had during his time about the science of Speech and Hearing.

Study overview. Initially, all the Thirukkural poems were screened to select those which have direct or indirect link to the subject of Speech, Language, Hearing and other Sensory inputs. With all these selected Kurals, modern scientific studies were compared for supportive, different, and disputable views. Then two different surveys on familiarity and relevance were undertaken to get an objective opinion about Thirukkural from a cross section of people. To assess the judgement of respondents, two types of questionaire were used at different periods of time, to get the research data on familiarity and on relevance. Questionnaire included a set of questions to which the individuals responded in writing. These questions were asked to the respondents to identify what they thought about Kural’s familiarity and relevance. Here the acquaintance knowledge of Thirukkural is considered as familiar. The familiarity study used a three point rating scale with ‘more familiar’, ‘less familiar’, and ‘not familiar’ as choices. The responses of familiarity with each and every Kural were noted by each category. Those scores were serially ranked on the basis of percentage. The applicability level of importance and the obvious relationship of Thiruvalluvar’s concepts to today’s healthy life are considered as relevance. The relevance level gave evidence to prove or disprove Thirukkural concepts’ need, for

today's healthy life. The obtained results from a cross section of people grouped in ten categories, who are directly or indirectly connected with the subject of Speech and Hearing science, were analyzed. The relevance survey used only important applicable poems which were familiar among fifty and above percent of people and used a five point Likert scale. The five point option for relevance judgment were given as 'strongly relevant', 'relevant', 'unable to judge', 'not relevant', 'strongly not relevant'. This questionnaire study assessed the judgment level of relevance of these Thirukkural poems to our present day healthy life. The obtained results were analyzed. The demographic details of these two surveys were also analyzed to get additional information for further valuable research inputs. The demographic details of the respondents included the factors like age, education, employment, geographical distribution, language proficiency, medium of instruction for academic study, etc. This study discussed both the subjective and the objective opinion of familiarity and relevance as expressed by the respondents. The overall views of public and their level of support or deviation about Kural ideas were drawn from this study.

Purpose of study: The main purpose of this study is to utilize our ancestral knowledge, values and skills for the betterment of our contemporary society and to test the following hypothesis:

1. Thirukkural written about 2000 years back has reported a lot of scientific facts about the topics of Speech, Language, Hearing and other Sensory inputs.
2. All these deserving scientific facts given in Thirukkural about these topics have not been brought to limelight for our developmental growth.
3. All the kurals which are considered to be related to the topics of Speech, Language, Hearing and other Sensory inputs are equally familiar across

the cross section of people spread in ten categories who are directly or indirectly connected with the subject of Speech and Hearing.

4. All the applicable familiar kurals on the said topics which enjoyed fifty percent and above of familiarity scores are equally relevant to today's healthy life.
5. The concepts of Speech, Language, Hearing, and other Sensory inputs as explained by Thiruvalluvar have withstood the test of time and they are highly relevant even to today's healthy life.
6. By following Thiruvalluvar's concepts of Speech, Language, Hearing and other Sensory inputs; men can meet even the difficult challenges and reach greater heights of skill achievement with empowerment. Many people can rise to the level of great leaders, guides, and role models.
7. Thirukkural helps to show the public a divine channel for a healthy, peaceful, and happy life with much better human behavior and public relations.

Implication of the Study: This study helped to take the real message given in Kural to the masses of the world for a peaceful, harmonious existence and prosperous development. A sincere effort in following the values in Kural would help us to eliminate lots of personal, social, economical and political problems. When his instructions on Speech, Language and Hearing are systematically followed, human excellence can be easily achieved. This study has highlighted many such works of our ancient literature which would bring insight to our modern study of Speech and Hearing. It has also taught to recognize and understand the merits of traditional skills and ancestral values.

CHAPTER - 2

REVIEW OF LITERATURE

The review of literature concerning this study is confined to Thirukkural and to the scientific field of Speech, Language, Hearing and other Sensory inputs. Till now, at different periods of time and on many occasions; Thirukkural has received a lot of literary comments, explanations and interpretations by different scholars. Starting from Parimelalagar, many scholars have tried their best to interpret and explain the kural poems. But the versatility of Thirukkural is so vast that hardly anybody could satisfactorily come up with a comprehensive and complete explanation. Everyone tried to interpret it with their own individual perceptual values and background knowledge. All the selected one hundred and twenty five Thirukkural poems that are connected directly or indirectly with implied meaning, to the topics of Speech, Language, Hearing and other Sensory inputs are serially numbered and listed as Reference No: 001 to Reference No: 125. The Kural poem, its number, its Tamil meaning, and the English translation are given for every reference. .

The following Kurals convey the views of Thiruvalluvar on power of Speech and Language. In the evolution of living organisms, only human beings are endowed with this unique skill of complex behavior called 'Speech'. Valluvar not only devoted an exclusive chapter for 'Power of Speech', but also spoke of this skill in various other chapters. He clearly says that Speech is wealth and it paves the way for a happy life. Even in modern subjects like Speech and Hearing, Neurology, Mental health and Management sciences the task of speech skill is used as an assessment tool for testing one's basic and advanced skill excellence. The speech assessment is done in addition to general behavior, mood, thought process and content, cognition, insight etc. One's

communicative speech can tell details about the structures and functions of concerned organs, sensory functions, mental make-up, and the prevailing environmental factors.

Speech and Social relationship:

Reference No: 001. Kural 1198 in Chapter 120 titled, "Pining Alone-தனிப்படர் மிகுதி" speaks of communication for sustaining / maintaining social relationship.

"வீழ்வாரின் இன்சொல் பெறாஅது உலகத்து
வாழ்வாரின் வன்கணார் இல்". (Kural 1198)

தான் விரும்பும் காதலரின் இனிய சொல்லைப் பெறாமல் உலகத்தில் (பிரிவுத் துன்பத்தைப் பொறுத்து) வாழ்கின்றவரைப்போல் வன்கண்மை உடையவர் இல்லை.

"None is harder than the one who can live
Without her lover's words of love".

It speaks about one's yearning for sweet words of love from the loving partner, and only such optimistic thinking will keep their hopes alive and positive. The availability of good speech and communication support from the partner gives her extra courage to take strong decisions. If the conversation does not take place, it will disturb the whole process of love and at its worst, it may even end up in a broken relationship. She might build up courage even to take up a tough stand to break the relationship. This Kural says that there is no one in the world as hard-hearted as those who can live without receiving a kind word from their beloved partner. This indicates that even in sensitive and subtle matters like love, speech process becomes a crucial issue in keeping the inter-personal relationship alive and continuous. Speech can be used either for informative or social purpose. The mutual social support is not only important for maintaining the relationship among loving partners, but also among the general population. In children with autism, the inability to maintain the required

social relationship adversely affects even the development of basic interactive process. In the book by Norman J. Lass (1988:675), Anne van Kleek et al says, “Communication ability influences and shapes the social relationship. Language delay can have a negative impact on parent–child and peer interaction”. The book by Norman J. Lass et al (1988:1023) quotes Barry M. Prizant who talks about social appropriateness. It refers to the extent to which communicative behavior follows accepted social conventions. The degree of social acceptability of communication depends upon how conventional the process is to others. Communicative attempts also take into account the needs of the listener. Appropriate initiations, topic maintenance and terminations are important dimensions of social acceptability of proper communication. Krishna Mohan and Meera Banerji (1990: 3-5) say, “Speech and language are the most prized possession of man and acts as a repository of wisdom, a propeller for knowledge advancement and a telescope to view the future. Man always tries to exploit the dynamism of language for conducting his day to day affairs. The barriers in communication include the absence of mutual trust, unclarified assumptions, premature evaluation of message, wrong perception of the reality, clash of attitudinal nuances etc”. This indicates the importance of social interaction in communication process and the problems it may pose when it is reduced or absent.

Pleasant speech: Kural 95, 112, 98, 97, 525, 387, 100, 99, 953, and 66 from Reference No: 2 to 11.

Reference No: 002. Kural 95 in Chapter 10 titled “Speaking Sweetly-இனியவை கூறல்” explains the use of pleasant speech.

“பணிவுடையன் இன்சொலன் ஆதல் ஒருவற்கு
அணிஅல்ல மற்றுப் பிற.” (Kural 95)

வணக்கம் உடையவனாகவும் இன்சொல் வழங்குவோனாகவும் ஆதலே ஒருவனுக்கு அணிகலனாகும்; மற்றைய அணிகள், அணிகள் அல்ல.

> "Humility and sweet words are one's jewels
> All others are not at all jewels".

Humility, courteous deportment and gentle speech add beauty to our regular speech and all other charecters do not enhance the true value of a person. The book of Howard S. Friedman (2006:460) quoting Brown & Levinson says that in each language, community enforces some norms of politeness that are reflective of its view on proper conversation.

Reference No: 003. Kural 1121 in Chapter 113 titled, "Glorification of Love- *காதற்சிறப்பு உரைத்தல்*" praise the sweetness of lover's speech.

> "பாலொடு தேன்கலந் தற்றே பணிமொழி
> வால்எயிறு ஊறிய நீர்". (Kural 1121)

மென்மையான மொழிகளைப் பேசுகின்ற இவளுடைய தூய பற்களில் ஊறிய நீர், பாலுடன் தேனைக் கலந்தாற் போன்றதாகும்.

> "The dew at the teeth of the soft-spoken lady
> Is like a mixture of milk and honey".

Valluvar puts the speech with kind words at the top spot in the sweetness ladder. Among all the natural food ingredients, the combination of milk and honey is considered to be very sweet and it is compared well with the saliva of a damsel, who has got sweet speech. The saliva of ladies who have sweet speech gains better recognition than of others. So, sweet speech adds beauty to the given function or character.

Reference No: 004. Kural 98 in Chapter 10 titled,“Speaking sweetly- இனியவைகூறல்” also reveals about the benefits of having added sweetness to our communicative speech.

“சிறுமையுள் நீங்கிய இன்சொல் மறுமையும்
இம்மையும் இன்பம் தரும்”. (Kural 98)

பிறர்க்குத் துன்பம் விளைவிக்கும் சிறுமையிலிருந்து நீங்கிய இனிய சொற்கள் மறுமைக்கும் இம்மைக்கும் வழங்குவோனுக்கு இன்பம் தரும்.

“Sweet words without meanness cheer
The life here and hereafter”.

This expresses that sweet speech not only give pleasure in this life, but also in the subsequent following births. The sweet speech sustains and carries its good effect even into the following generations which can be many long years after its initial utterance. The book of Norman J. Lass (1988: 624) cites the genetic research study by Andrews and Harris et al which support the familial basis to stuttering. If the genetic basis can be attributed to stammering speech, even the attribute of sweet speech can have genetic basis. Though rebirth concept is a questionable one for modern science, reincarnation of birth is still debated. Sri Aurobindo (2007:23) says that incarnates in another birth will create for itself a different personality, different capacities, a different life and career. By referring to various incidents, Raja Yogi B. K. Jagdish Chander (1985:41) quotes incidents and says that they lead one to believe that there is an eternal entity called soul which does not die when the body dies.

Reference No: 005. Kural 97 in Chapter 10 titled,“Speaking sweetly- இனியவைகூறல்” tells about the benefit of sweet and pleasant speech.

“ நயன்ஈன்று நன்றி பயக்கும் பயன்ஈன்று
பண்பின் தலைப்பிரியாச் சொல்”. (Kural 97)

பிறர்க்கு நன்மையான பயனைத் தந்து நல்ல பண்பிலிருந்து நீங்காத சொற்கள், வழங்குவோனுக்கும், இன்பம் தந்து நன்மை பயக்கும்.

"Fruitful, polite and pleasant words
Beget happiness and fortunes".

The usage of pleasant words and courteous sweet speech will bring a lot of benefits including happiness and prosperity for both the listener and the speaker. But on the contrary, harsh words can bring enmity and sad feelings. So he emphasizes that we should use only sweet words.

Reference No: 006. Kural 525 in Chapter 53 titled,"Cherishing Relatives-*சுற்றம் தழால்*" speaks high of the good manners of having polite and pleasing speech, which can be used for social attraction.

"கொடுத்தலும் இன்சொலும் ஆற்றின் அடுக்கிய
சுற்றத்தால் சுற்றப் படும்". (Kural 525)

பொருள் கொடுத்தலும் இன்சொல் கூறுதலுமாகிய இரண்டும் செய்ய வல்லவனானால், ஒருவன் தொடர்ந்த பல சுற்றத்தால் சூழப்படுவான்.

"Generosity and sweet words enable one
To be circled by multitude of kin".

Whoever manifests generosity by giving the required objects and affability with the use of polite, pleasant and courteous speech, will be surrounded by numerous relatives and friends. They can enhance personal interaction and definitely make a big social network.

Reference No: 007. Kural 387 in Chapter 39 titled, "Regal Dignity-*இறை மாட்சி*" also talks about pleasant speech, and is said to be a good attribute of famous Kings.

" இன்சொலால் ஈத்துஅளிக்க வல்லார்க்குத் தன்சொலால்
தான்கண் டனைத்துஇவ் வுலகு". (Kural 387)

இனியசொற்களுடன் தக்கவர்க்குப் பொருளைஉதவிக் காக்கவல்ல அரசனுக்கு இவ்வுலகம் தன் புகழோடு தான் கருதியபடி அமைவதாகும்.

"The world surely extols and obeys the words
Of one who kindly speaks, gives, and guards".

If a king uses pleasant words, gives the needy their needs and safely guards all the citizens, he will become famous. He will enjoy a good control over the whole country. The utterances of pleasing words can be expected only when the utterer's body is relaxed, emotions are stable, the environment is conducive and the country is peaceful. So, by speaking about pleasant words Valluvar brings all these prerequisite good qualities in a nutshell for peaceful life, and suggests the ideal living setup for human beings. In the book by Norman J. Lass (1988: 692), Donahue says that her data on request strategies clearly implicate deficits in the understanding of social relationship by learning disabled children. Though her study subjects did adjust their speech styles, it was in an abnormal direction. They showed greater degree of politeness with friends than with strangers.

Reference No: 008. While acknowledging the good effects of using pleasant words, Kural 100 in Chapter10 titled, "Speaking sweetly- *இனியவைகூறல்*" questions the need of using harsh words.

" இனிய உளவாக இன்னாத கூறல்
கனியிருப்பக் காய்கவர்ந் தற்று". (Kural 100)

இனிய சொற்கள் இருக்கும்போது அவற்றைவிட்டுக் கடுமையான சொற்களைக் கூறுதல் கனிகள் இருக்கும்போது காய்களைப் பறித்துத் தின்பதைப் போன்றது.

"Using bitter words instead of pleasant words
Is like preferring unripe fruits to ripe ones".

His poem ridicules the wrong choice of using the unpleasant, abusive and hurting words when gentle and pleasant words are readily available within our reach. This is like eating unripe fruit when the ripe ones are available. It is inferred that such an activity is foolish and is expected to bring ill effects in our lives. Only the uncultured people are expected to use such a type of speech and language. It implies that for progress and development, we have to use pleasing and kind words only.

Reference No: 009. Kural 99 in Chapter 10 titled, "Speaking sweetly- *இனியவைகூறல்*" questions the need to use harsh words.

"இன்சொல் இனிதுஈன்றல் காண்பான் எவன்கொலோ
வன்சொல் வழங்கு வது." (Kural 99)

இனியசொற்கள் இன்பம் பயத்தலைக் காண்கின்றவன்,அவற்றிற்கு மாறான வன்சொற்களை வழங்குவது என்ன பயன் கருதியோ?

"Knowing well the pleasure of sweet words
Why cast bitter ones at others? "

The use of sweet words in our communication yields pleasure and many of us have experienced the joy derived out of such utterances. So, it is really strange that we use harsh words in our conversation which implies that we should never use unpleasant words.

Reference No: 010. Kural 953 in Chapter 96 titled, "Noble Birth- குடிமை" tells the use of pleasing words as one of the qualities of nobility.

"நகைஈகை இன்சொல் இகழாமை நான்கும்
வகைஎன்ப வாய்மைக் குடிக்கு." (Kural 953)

உண்மையான உயர்குடியில் பிறந்தவர்க்கு முகமலர்ச்சி, ஈகை, இனிய சொல், பிறரை இகழ்ந்து கூறாமை ஆகிய நான்கும் நல்ல பண்புகள் என்பர்.

"Smile, Charity, pleasant words and civility -
These four are marks of true nobility".

People with true nobility and with the so called 'high-born' status will have the qualities of a cheerful countenance, liberality, pleasant words, and an unraveling disposition. All these four expressions reveal the functional status and anybody can cultivate these traits by practice.

Reference No: 011. Kural 66 in Chapter 7 titled "Worthy Children–மக்கட்பேறு" tell about babbling.

"குழல்இனிது யாழ்இனிது என்பதம் மக்கள்
மழலைச்சொல் கேளா தவர்". (Kural 66)

தம் மக்களின் மழலைச் சொல்லைக் கேட்டு அதன் இனிமையை நுகராதவரே குழலின் இசை இனியது, யாழின் இசை இனியது என்று கூறுவர்.

"Who have not heard their babies' babble
Say flute and lute are delightful".

He says that only those people who have not heard the prattle of their own children will speak in praise of other musical instrumental sounds like that of a flute or a string. He says that the babbling speech of children is so nice to hear and enjoy. George Yule (1996:139-140) says that the pre-linguistic sounds of the very early stages of child language acquisition are simply called 'cooing' and 'babbling'. Since parents tend to react to babbling, the child contributes to social interaction.

Vain words:

Reference No: 012. Kural 198 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" proposes to use the deeply significant worthy speech only.

"அரும்பயன் ஆயும் அறிவினார் சொல்லார்
பெரும்பயன் இல்லாத சொல்". (Kural 198)

அருமையான பயன்களை ஆராயவல்ல அறிவை உடைய அறிஞர், மிக்க பயன் இல்லாத சொற்களை ஒருபோதும் சொல்லமாட்டார்.

"The wise who discern merit won't utter
Words that lack gains greater".

It is very common for the wise people to seek after rare pleasures and advantages. In their speech, they weigh the worth of every utterance and will not speak fruitless words. Even in lapsed conditions and in faulty utterances, they will not speak useless words. It implies that wise people will use and speak only significant words, which are meaningful in its utterance.

Cunning Speech:

Reference No: 013. Kural 826 in Chapter 83 titled, "Undesirable friendship-கூடா நட்பு" indicates cunning speech.

" நட்டார்போல் நல்லவை சொல்லினும் ஒட்டார்சொல்
ஒல்லை உணரப் படும்." (Kural 826)

நண்பர்போல் நன்மையானவற்றைச் சொன்ன போதிலும் பகைமை கொண்டவர் சொல்லும் சொற்களின் உண்மைத் தன்மை விரைவில் உணரப்படும்.

"Though foes may utter good words like mates
Their evil mind will be realized at once".

Foes may utter something which appears to be good suggestions for us and try to make us believe that they are our genuine friends. But, soon their activities will indicate their ulterior motive and real intentions; which are usually evil in nature and can spoil our progress. Similar expression is evidently seen in another Tamil poem. Thiruvarutprakasa Vallalar says, "உள்ளொன்று வைத்துப் புறமொன்று பேசுவார் உறவு கலவாமை வேண்டும்" which means that we should not have friendship with people who speak cunningly.

Syntax and Semantics: Kural 649, 191,721and 645 from Reference Nos: 14 to 17.

Reference No: 014. Kural 649 in Chapter 65 titled, "Power of Speech- சொல்வன்மை" hails the importance of syntax and using the appropriate vocabulary.

"பலசொல்லக் காமுறுவர் மன்றமாசு அற்ற
சிலசொல்லல் தேற்றா தவர்" . (Kural 649)

குற்றமற்றவையாகிய சில சொற்களைச் சொல்லத் தெரியாதவர், உண்மையாகவே பல சொற்களைச் சொல்லிக் கொண்டிருக்க விரும்புவர்.

"Who cannot speak brief and flawless words
Are fond of uttering too many words".

Only those who can not speak in a few faultless words, will desire to utter many words to express the same concept. Generally, a person with aphasia will get stuck on an idea or a response. Cynthia L. Jones et al (2005:15) says, "Word finding problems in aphasia are an extension of the problems seen in normal population. The person who has neurological disorders like aphasia or cognitive delay is unable to use such representative words or symbols and face communication breakdown. For a good speech output, a very clear knowledge-base is important. The problems may be

in receptive language, inner language, cognition and expressive language". Eldon E, Ekwall, and James L.Shanker (1983:7) in their book quote Robinson who reported that speech problems were considered to be a probable cause of reading failures in fourteen percent of her cases. In the book by Norman J. Lass (1988:719), Arthur M.Guilford says, "Difficulties with word finding also have been reported to be symptomatic of children with language disabilities". The book by Roberta Chapey (1986:465) cites Kathryn A.Bayles who says, "… talking around an idea or failing to express it explicitly is circumlocution and is associated mostly with anomic aphasia. When the desired word is not available, the individual will attempt to substitute a description".

Reference No: 015. Kural 191 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" says about the correct use of pragmatic structure and the consequences of its improper use.

"பல்லார் முனியப் பயன்இல் சொல்லுவான்
எல்லாரும் எள்ளப் படும்" . (Kural 191)

கேட்டவர் பலரும் வெறுக்கும்படியாகப் பயனில்லாத சொற்களைச் சொல்லுகின்றவன், எல்லோராலும் இகழப்படுவான்.

"Who utters vain words displeasing all
Is despised by one and all".

Since useless speech is disgusting to the listener and despise others, only the correct word expressions are to be used**.** The book of Norman J. Lass et al (1988:867) quotes Mary Joe Osberger et al as saying, "the hearing impaired children were observed to give more inappropriate and ambiguous responses when higher levels of abstraction were required to answer questions".

Reference No: 016. Kural 721 and other poems in Chapter 73 titled, "Not fearing the assembly- அவை அஞ்சாமை" exalt boldly using the correct word to effectively face the council.

"வகைஅறிந்து வல்லவை வாய்சோரார் சொல்லின்
தொகைஅறிந்த தூய்மை யவர்". (Kural 721)

சொற்களின் தொகுதி அறிந்த தூய்மை உடையவர் அவைக்களத்தின் வகையினை அறிந்து வல்லவரின் அவையில் வாய் சோர்ந்து பிழை சொல்லமாட்டார்.

"Knowing the word power and the council's mood
Men of purity speak not anything absurd".

We should be strong and sure in knowing the classification of words and ascertaining the nature of the court. Since fear may be the cause for our faulty speech, we should put forth our ideas in a bold manner while facing the assembly. Charles Van Riper (1982: 145-154) says, "…the most common of the advanced stutterer's feeling is fear and it is the expectation of unpleasantness which may range from vague doubt to complete certainty. The expectation of communicative inability, verbal impotence, loss of self control, and moment of muteness etc can cause fear. Stutterer may be afraid of social penalty and stigma. He may dread listener loss or some other kind of rejection. Most stutterers are afraid of speaking to people in authority, prospective employers, parents, teachers, or opposite sex. Many stutterers dread speaking to groups more than to individuals. A particular situation, or word, or phoneme may cause fear".

Reference No: 017. Kural 645 in Chapter 65 titled,"Power of Speech- சொல்வன்மை." emphasizes the importance of semantic structure.

“ சொல்லுக சொல்லைப் பிறிதுஓர்சொல் அச்சொல்லை
வெல்லும்சொல் இன்மை அறிந்து”. (Kural 645)

வேறொரு சொல் அந்தச் சொல்லை வெல்லும் சொல்லாக இல்லாதிருத்தலை அறிந்த பிறகே சொல்லக் கருதியதைச் சொல்லவேண்டும்.

“Select and speak only such words
Not excelled by other words”.

Only after assuring that no argument of the opponent side can defeat us, we should deliver our speech. The appropriate word should be used in communication to make the expression strong and successful. Some aspects of semantic development reflect one’s conceptual growth. Difficulties in word finding are likely to result in problems with expressive syntax and word order.

Pragmatic Language: Kural 490, 644, 714 and 715 from Reference 18 to 21.

Reference No: 018. Kural 490 in Chapter 49 titled, “Choosing proper time-காலம் அறிதல்” advocates striking at the correct time to make use of the correct opportunity.

“கொக்குஒக்க கூம்பும் பருவத்து: மற்றுஅதன்
குத்துஒக்க சீர்த்த இடத்து”. (Kural 490)

பொறுத்திருத்தல் காலத்தில் கொக்குப்போல் அமைதியாக இருக்கவேண்டும்:
காலம் வாய்த்த போது அதன் குத்துப் போல் தவறாமல் செய்து முடிக்கவேண்டும்.

“Just like a stork, bide your time
Act with might at right time”.

At the time when one should use self-control, let him restrain like a heron; and strike when there is a favorable opportunity. We have to be patient enough looking out for the good occasion, for striking the best deal. When the time is ripe, we have to

act with swiftness, to make sure of our success. At any cost, we should not miss the golden opportunity. Just like any other activity, even in language use, we have to use the correct form of language in fitting contexts.

Reference No: 019. Kural 644 in Chapter 65 titled, "Power of Speech-சொல்வன்மை" speaks about pragmatic speech.

"திறன்அறிந்து சொல்லுக சொல்லை அறனும்
பொருளும் அதனின்ஊஉங்கு இல்". (Kural 644)

சொல்லின் திறத்தை அறிந்து சொல்லை வழங்க வேண்டும்;அத்தகைய சொல்வன்மையைவிடச் சிறந்த அறமும் பொருளும் இல்லை.

"Weigh and utter your words very well
That no virtue and wealth can excel".

There is no superior virtue than understanding the qualities of our listeners, for delivering the appropriate speech. Margaret Lahey (1988:2) indicates that communication in addition to the purposes or functions of language; also depends upon the ways in which the speakers vary, what they say, audience type, and what is happening around when they talk.

Reference No: 020. Kural 714 in Chapter 72 under the title, "Knowing the Assembly- அவை அறிதல்." says about the behavior adaptation to suit the prevailing situations.

" ஒளியார்முன் ஒள்ளியர் ஆதல் வெளியார்முன்
வான்சுதை வண்ணம் கொளல்". (Kural 714)

அறிவிற்சிறந்தவரின்முன் தாமும் அறிவிற் சிறந்தவராய்ப் பேசவேண்டும்; அறிவில்லாதவர் முன் தாமும் வெண்சுண்ணம்போல் அறிவில்லாதவராய் இருக்கவேண்டும்.

"Be brilliant ever before the bright
Before the dull, be chalkwhite".

We have to be a radiant speaker before elite audience and talk accordingly. He says that in the assembly of learned people, one has to use such words which can prove that he is also learned. If the audience is composed of simple folks, we have to hold back our learning and act as if we are a simple common man.

Reference No: 021. Kural 715 in Chapter 72 titled, "Knowing the Assembly-அவை அறிதல்" speaks about the merit of turn taking and explains about humbleness to wait.

"நன்றுஎன்ற வற்றுள்ளும் நன்றே முதுவருள்
முந்து கிளவாச் செறிவு". (Kural 715)

அறிவு மிகுந்தவரிடையே முந்திச் சென்று பேசாத அடக்கம் ஒருவனுக்கு நன்மை என்று சொல்லப்பட்டவை எல்லாவற்றிலும் நல்லது.

"Holding back before the wise
Is the best of all virtues".

The modesty of not rushing forward to speak in an assembly of superiors or seniors in age or persons with great accomplishments is a good quality. It is wise to be polite and humble and wait for our chance. The study by Roberta Chapey (1986:227) says that the reciprocal nature of communication involves a number of aspects including the initiation of the speech act and the maintenance of communication.

Regulated Speech:

Reference No: 022. Kural 127 in Chapter 13 titled, "Self control-அடக்கம் உடைமை" speaks about controlling one's speech.

"யாகாவார் ஆயினும் நாகாக்க காவாக்கால்
சோகாப்பர் சொல்லிழுக்குப் பட்டு". (Kural 127)

காக்க வேண்டியவற்றுள் எவற்றைக் காக்காவிட்டாலும் நாவையாவது காக்கவேண்டும். காக்கத் தவறினால் சொற் குற்றத்தில் அகப்பட்டுத் துன்புறுவர்.

"Control your tongue if not anything; otherwise
A slip of the tongue brings evils".

Even if we leave many other things unleashed, we need not worry much about that. But, we have to make sure that we hold our tongue and mind our words. Otherwise, errors of speech and the consequent misery will ensue; and we will have to suffer for having used an unwarranted, unethical, or unpleasant word. This shows that we have to use restrain in using the spoken words.

Whisper and Smile:

Reference No: 023. Kural 694 in Chapter 70 titled, "Associating with Rulers- மன்னரை சேர்ந்து ஒழுகல்" advises to avoid whispering and smiling in a king's court.

"செவிச்சொல்லும் சேர்ந்த நகையும் அவித்துஒழுகல்
ஆன்ற பெரியா ரகத்து". (Kural 694)

வல்லமை அமைந்த பெரியாரிடத்தில்,(மற்றொருவன்) செவியை நெருங்கிச் சொல்லுதலும் உடன் சேர்ந்து நகைத்தலும் செய்யாமல் ஒழுக வேண்டும்.

"Avoid whispering and laughing
In the presence of a great king".

He advises us to avoid whispering and smiling in a group discussion or in an activity. In the presence of the sovereign king and ministers, others should never whisper or smile for a short circuited internal communication. Premakumari C.B. (1992:49) in her study said that most children, by the age of three years, have the ability to whisper functionally. Peter J.Valletutti et al (1985:9) say that the teacher having same sense of humor in the classroom, which is not hostile or sarcastic, will help. Krishnamohan et al (2004:47, 48) say that the 'whispered side conversations' in

which the commentator indulges can distract a meeting and split the group. They also say that an effective way to deal with this situation is to bring about silence.

Doing things well in time: Reference No: 024. Kural 335 in Chapter 34 titled, “Impermanence- நிலையாமை” asks us not to wait for a better time to do good things.

> “ நாச்செற்று விக்குள்மேல் வாராமுன் நல்வினை
> மேற்சென்று செய்யப் படும்”. (Kural 335)

நாவை அடக்கி விக்கல் மேலெழுவதற்கு முன்னே (இறப்பு நெருங்குவதற்குமுன்) நல்ல அறச்செயல் விரைந்து செய்யத் தக்கதாகும்.

> “Always hasten to do good and virtuous deeds
> Before tongue fails and last hiccup comes”.

It says that we should not lose time for doing good things in our life. Since both the activities of breathing and speech get their basic energy from respiratory air, they are closely associated. In Tamil, the words for‘breathing’ and ‘speech’ are almost always expressed together as ‘மூச்சும் பேச்சும்’. We lose our speech even before we get into the critical periods of life due to serious illness or accidental trauma. Since some of the serious illnesses and accidents are sudden in nature, the prediction of this critical time or event becomes impossible. So, it is advised not to wait for a better time in our life to do good things. In the book by Norman J. Lass (1988:211-212), Donald W.Warren says, “… the speech process involves many complex behaviors that are controlled in a precise way. Generation of the air stream and its modification by the articulators require a high degree of integration and coordination at the level of central and peripheral nervous system”. But even the small changes in its coordination can result in speech problem. At the worst level, all the activities of integration can fail and result in total loss of speech. If a hiccup arises due to some illness and makes

the tongue non-functional, it almost indicates the last days of our life. Sometimes during that period, we may not be able to speak or do whatever we want to do. So, instead of waiting for a better time, we have to do the virtuous acts and deeds quickly. Since life is not permanent and death can occur any time, be a good follower of justice and do good things quickly without any delay.

Understanding audience: Kural 711, 712, 713 and 872 from Reference 25 to 28.

Reference No: 025. Kural 711 coming in Chapter 72 titled,"Knowing the Assembly-அவை அறிதல்" speak about forming and delivering the speech according to the need and nature of the audience.

"அவைஅறிந்து ஆராய்ந்து சொல்லுக சொல்லின்
தொகைஅறிந்த தூய்மை யவர்" (Kural 711)

சொற்களின் தொகுதி அறிந்த தூய்மை உடையவர், அவைக்களத்தின் தன்மை அறிந்து ஏற்ற சொற்களை ஆராய்ந்து சொல்ல வேண்டும்.

"Those with pure mind and studied eloquence
Should use words that suit the audience".

He emphasizes the importance of using appropriate language, according to the need of the situation and the nature of the audience. A good speaker should make a note of the disposition and mood of the assembly, choose the right words and adopt a suitable style. The minister had to deal not only with the king, but also with the council that sits to debate on affairs.

Reference No: 026. Kural 712 in Chapter 72 titled, "Knowing the Assembly-அவை அறிதல்" also speak about framing the speech in accordance with the need and nature of audience.

"இடைதெரிந்து நன்குஉணர்ந்து சொல்லுக சொல்லின்
நடைதெரிந்த நன்மை யவர்". (Kural 712)

சொற்களின் நடையை ஆராய்ந்த நன்மை உடையவர், அவையின் செவியை ஆராய்ந்து நன்றாக உணர்ந்து சொல்ல வேண்டும்.

"Men of eloquence judge and speak words ."
To suit the time and listeners' moods" .

A good speaker should have a clear understanding of the subject matter and also about the receptive capacity of the audience. He should know how to use the right words and speak with a clear knowledge after ascertaining the time suited to the court. Margaret Lahey (1988:17) says that when engaged in social exchanges with other persons, one must know how to initiate, maintain, and terminate a conversation.

Reference No: 027. Kural 713 in Chapter 72 titled,"Knowing the Assembly- அவை அறிதல்" explains about the inadequate planning in speech.

"அவைஅறியார் சொல்லல்மேற் கொள்பவர் சொல்லின்
வகையறியார் வல்லதூஉம் இல்". (Kural 713)

அவையின் தன்மை அறியாமல் சொல்லுதலை மேற்கொள்கின்றவர், சொற்களின் வகை அறியாதவரே; அவர் சொல்லவல்லதும் இல்லை.

"Who speak unmindful of the audience
Lack diction and eloquence".

It speaks about the inadequate preparation of a speech which does not match the need, situations and the nature of the audience. Those who speak without knowing the nature of the court will also be ignorant of selection of proper words. They are considered to be a poor speaker and devoid of having the power to learn. Such a speaker will not achieve a good result. Valluvar teaches us the ways and means to talk

well according to the prevailing situations. Before starting the speech delivery; the speaker has to know the proper words and their order, the expected impact of speech on the audience and the type of audience etc

Reference No: 028. Kural 872 in Chapter 88 titled, “On Enmity-பகைத்திறம் தெரிதல்” says that we should not hate the relationship with learned persons.

“வில்லேர் உழவர் பகைகொளினும் கொள்ளற்க
சொல்லேர் உழவர் பகை.” (Kural 872)

வில்லை ஏராக உடைய உழவராகிய வீரருடன் பகை கொண்ட போதிலும், சொல்லை ஏராகஉடைய உழவராகியஅறிஞருடன் பகைக்கொள்ளக் கூடாது.

“Even if you incur enmity of archers
Never earn enmity of orators”.

He says that even if we happen to develop hatred towards warriors, we should not go to the extent of hating learned persons whose weapons are speech. The hostility of soldiers is not as bad as that of men whose weapon is their speech. Here the word “soll-சொல்” may mean either verbal or written form. In those days of Valluvar, warriors were probably considered superior in professional service. In a comparison between warriors and persons with literary activities, he attaches more importance to persons with literary skills.

Useless Speech: Kural 194, 192, 193, 195, 196 and 197 from Reference Nos: 29 to 34.

Reference No: 029. Kural 194 in Chapter 20 titled, “Not speaking vain words-பயன் இல சொல்லாமை” tells about the consequences of irrelevant speech.

"நயன்சாரா நன்மையின் நீக்கும் பயன்சாராப்
பண்பில்சொல் பல்லா ரகத்து." (Kural 194)

பயனோடு பொருந்தாத பண்பு இல்லாத சொற்களைப் பலரிடத்தும் சொல்லுதல், அறத்தோடு பொருந்தாமல் நன்மையிலிருந்து நீங்கச் செய்யும்.

"One's vain and crude words before an assembly
Remove one's gains and goodness simply."

A speech with virtue and goodness will yield profit and pleasure. But, a speech without good meaning or ethics is considered to be useless; and a person using it may be considered to be bad.

Reference No: 030. Kural 192 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" also speaks about useless Speech.

"பயன்இல பல்லார்முன் சொல்லல் நயன்இல
நட்டார்கண் செய்தலின் தீது". (Kural 192)

பலர்முன்னே பயனில்லாத சொற்களைச் சொல்லுதல், நண்பரிடத்தில் அறம் இல்லாத செயல்களைச் செய்தலைவிடத் தீமையானதாகும்.

"Vain words spoken in public are worse
Than wrongs done to mates".

Speaking useless words can bring sad and shameful results. This big evil is much worse than doing an unkind act of betrayal done to a friend.

Reference No: 031. Kural 193 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" also speaks about useless Speech.

"நயன்இலன் என்பது சொல்லும் பயன்இல
பாரித் துரைக்கும் உரை." (Kural 193)

ஒருவன் பயனில்லாத பொருள்களைப் பற்றி விரிவாகச் சொல்லும்சொற்கள், அவன் அறம் இல்லாதவன் என்பதை அறிவிக்கும்.

"Long and vain speech trumpets
One's utter worthlessness".

In a conversation, if a man utters useless words; he will be creating a bad image of himself as one lacking in social niceties.

Reference No: 032. Kural 195 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" talks about useless Speech and it's after effects.

"சீர்மை சிறப்பொடு நீங்கும் பயன்இல
நீர்மை உடையார் சொலின்." (Kural 195)

பயனில்லாத சொற்களை நல்ல பண்பு உடையவர் சொல்லுவாரானால், அவருடைய மேம்பாடு அவர்க்குரிய மதிப்போடு நீங்கும்.

"Whenever the good speak useless words
All esteem and eminence they lose".

The good speech of the well behaved people will raise their status. But, if they start using useless vain words; their good image will get tarnished, and they will lose their eminence and excellence.

Reference No: 033. Kural 196 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" also talks about useless speech and its after-effects.

"பயனில்சொல் பாராட்டு வானை மகனெனல்
மக்கட் பதடி எனல்". (Kural 196)

பயனில்லாத சொற்களைப் பலமுறையும் சொல்லுகின்ற ஒருவனை மனிதன் என்று சொல்லக்கூடாது; மக்களுள் பதர் என்று சொல்ல வேண்டும்.

"Who speaks vain words call him not a man
Rather call him a chaff among men".

A person who speaks a lot of vain words continuously and intentionally will be considered worthless and can not be considered a human being at all.

Reference No: 034. Kural 197 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" talks about avoiding useless Speech.

"நயன்இல சொல்லினும் சொல்லுக சான்றோர்
பயன்இல சொல்லாமை நன்று". (Kural 197)

அறம் இல்லாதவற்றைச் சொன்னாலும் சொல்லலாம்; சான்றோர் பயனில்லாத சொற்களைச் சொல்லாமல் இருத்தல் நன்மையாகும்.

"It's good for the perfect to utter not vain words
Even if they speak unjust words".

It speaks about the speech of wise people. Even if they do not come out with good useful speech, it will be good of them not to talk useless words.

Diplomatic Speech:

Reference No: 035. Kural 646 in Chapter 65 titled, "Power of Speech சொல்வன்மை" reveals the quality of diplomatic speech.

" வேட்பத்தாம் சொல்லிப் பிறர்சொல் பயன்கோடல்
மாட்சியின் மாசற்றார் கோள்". (Kural 646)

பிறர் விரும்பும்படியாகத் தாம் சொல்லி, பிறர் சொல்லும்போது அச்சொல்லின் பயனை ஆராய்ந்து கொள்ளுதல் மாசற்ற சிறப்புடையவரின் கொள்கையாகும்.

"Code of spotless men is to say what is desirable
And grasp from others what is useful".

A good diplomat should speak in such a way that his listeners are well motivated to listen. He should also be good enough to grasp all the meaning of other's speech. Such an act can help him to have maximum benefits.

Back-biting Speech: Kurals 181 and 184 from Reference No. 36 to 37.

Reference No: 036. Kural 181 in Chapter 19 titled, "Not Back biting-புறங்கூறாமை" says that we should avoid back biting.

"அறம்கூறான் அல்ல செயினும் ஒருவன்
புறம்கூறா னென்றல் இனிது". (Kural 181)

ஒருவன் அறத்தைப் போற்றிக் கூறாதவனாய் அறமல்லாதவற்றைச் செய்தாலும், மற்றவனைப்பற்றிப் புறங் கூறாமல் இருக்கிறான் என்று சொல்லப்படுதல் நல்லது.

"Though one ignores virtue and does evils
It is good not to back bite others".

Even if one ignores all virtues and always indulges in sinful activities, it will be good of him not to involve himself in back-biting. Even if one is considered to be bad, it will bring him glory if he avoids speaking ill of others.

Reference No: 037. Kural 184 in Chapter 19 titled, "Not Backbiting-புறங்கூறாமை" tells us to avoid back-biting.

"கண்நின்று கண்அறச் சொல்லினும் சொல்லற்க
முன்இன்று பின்நோக்காச் சொல்". (Kural 184)

எதிரே நின்று கண்ணோட்டம் இல்லாமல் கடுமையாகச் சொன்னாலும் சொல்லலாம்; நேரில் இல்லாதபோது பின் விளைவை ஆராயாத சொல்லைச் சொல்லக் கூடாது.

"You may utter heartless words to one's face
But back bite not ignoring after-effects".

Sometimes when we get angry, we may speak harsh and unkind words face to face. But, we should see that we do not indulge in the folly of attacking any one behind his scene. In the absence of a person, speaking ill of him should be avoided. Otherwise the speaker would have to repent later when he faces bad consequences.

Teaching skill:

Reference No: 038. Kural 650 in Chapter 65 titled, "The power of Speech சொல்வன்மை" speaks about people who lack teaching skills.

"இணர்ஊழ்த்தும் நாறா மலர்அனையர் கற்றது
உணர விரித்துஉரையா தார்." (Kural 650)

தாம் கற்ற நூற்பொருளைப் பிறர் உணருமாறு விரித்துரைக்க முடியாதவர், கொத்தாக மலர்ந்திருந்த போதிலும் மணம் கமழாத மலரைப் போன்றவர்.

"Who cannot express their lore to others
Are like a bunch of scentless flowers".

Teachers without teaching skills are like flowers blooming in bunches but without fragrance. Even if they have good academic and other relevant skills, it will not help his students. Philip Cartwright G. et al (1985:420) say that for successful mainstreaming of children with disabilities; a teacher must integrate both the student and possible technology, to ensure the most appropriate learning environment for the child. Lyndall Rich H. (1982:217) quotes Smith et al as saying that the teacher is the single most critical factor in determining the conditions for learning in classroom.

Faultless falsehood: Kural 292 and 291 from Reference No: 39 to 40.

Reference No: 039. Kural 292 in Chapter 30 titled, "Truthfulness-*வாய்மை*" speaks about the benefits of faultless falsehood.

"பொய்மையும் வாய்மை இடத்த, புரைதீர்ந்த
நன்மை பயக்கும் எனின்". (Kural 292)

குற்றம் தீர்ந்த நன்மையை விளைவிக்குமானால், பொய்யான சொற்களும் வாய்மை என்று கருதத்தக்க இடத்தைப் பெறுவனவாம்.

"Even untruth has the stamp of truthfulness
If it brings good sans harmfulness".

If falsehood brings any benefit without causing any harm to others, it may be considered the truth. When a doctor gives a placebo, it may do well to the patient. Howard S.Friedman (2006:436) says that a placebo does not have a specific, expected, direct physiological effect on the body. He reports that placebo effects, operating through psychological mechanism, are very real and substantial. Kulandaiswamy V.C. (2002:80) says, "it is absolutely practicable definition of truth and will be valid in any society in any age. Valluvar has given similar morally sustainable approaches to all issues of life".

Reference No: 040. Kural 291 in Chapter 30titled, "Truthfulness-*வாய்மை*" explains similar concept.

"வாய்மை எனப்படுவது யாதுஎனின் யாதுஒன்றும்
தீமை இலாத சொலல்." (Kural 291)

வாய்மை என்று கூறப்படுவது எது என்றால், அது மற்றவர்க்கு ஒரு சிறிதும் தீமை இல்லாத சொற்களைச் சொல்லுதல் ஆகும்.

"What is truth?" if the question be
It's speech with words evil-free".

It says that truth means speaking those words which are free from causing the evil to others. Truth is also subjected to the additional test of harmlessness.

Speech as a nobility indicator:

Reference No: 041. Kural 959 in Chapter 96 titled, “Noble Birth-குடிமை” speaks about the prediction of one’s status from his speech.

“நிலத்தில் கிடந்தமை கால்காட்டும்; காட்டும்
குலத்தில் பிறந்தார்வாய்ச் சொல்”. (Kural 959)

இன்ன நிலத்தில் இருந்து முளைத்தது என்பதை முளை காட்டும்: அதுபோல குடியிற் பிறந்தவரின் வாய்ச்சொல் அவருடைய குடிப்பிறப்பைக் காட்டும்.

“As the nature of the soil is seen from sprouts
Nature of birth is seen from one’s talks”.

As the sprouted seed indicates the nature of the soil and its environment, one’s speech indicates the background of his birth and nobility status. Though ‘Kulam-குலம்’ generally indicates the hereditary and genetic status, it can also mean the environmental factors that can influence the outcome of one’s speech. Both the genetic and environmental factors will influence one’s speech. Though Thiruvalluvar’s use of this term is not explicit, speech can be the product of both genetic aspect and environmental factors. Chomsky argued for the biological basis for language development and it is quoted in the book by Deena K.Bernstein (1989: 25 , 26). One of the important aspects of Piaget’s theory includes that biological structures focus and direct the infant’s learning. These authors believe that children have innate or instinctive language ability. Howard S. Friedman (2006:445) says that it is important to understand that cultural as well as biological and social influences profoundly shape one’s personality.

Speech of administrators / kings: Kural 386, 139, 1057, 199, 200, 187 and 129 from Reference Nos: 42 to 48.

Reference No: 042. Kural 386 in Chapter 39 titled, "Regal Dignity-இறை மாட்சி" says that the qualities of the King include the behavior of not using harsh words.

"காட்சிக்கு எளியன் கடுஞ்சொல்லன் அல்லனேல்
மீக்கூறும் மன்னன் நிலம்". (Kural 386)

காண்பதற்கு எளியவனாய், கடுஞ்சொல் கூறாதவனாய் இருந்தால், அந்த மன்னனுடைய ஆட்சிக்கு உட்பட்ட நாட்டை உலகம் புகழும்.

"The world extols the land of the ruler
With easy access and words sweeter".

Valluvar highlights that 'not using harsh language' is one of the many good pre-requisite qualities of a king or an administrator. The whole world will exalt the country of the king who is easy to access, and who is free from harsh speech. Any state having such a king or administrator will attain name and fame.

Reference No: 043. Kural 139 in Chapter14 titled, "Discipline-ஒழுக்கம் உடைமை" explains about decorum in speech.

"ஒழுக்க முடையவர்க்கு ஒல்லாவே தீய
வழுக்கியும் வாயால் சொலல்" (Kural 139)

தீய சொற்களைத் தவறியும் தம்முடைய வாயால் சொல்லும் குற்றம், ஒழுக்கம் உடையவர்க்குப் பொருந்தாததாகும்.

"It's hard for men of virtuous conduct to utter
Even by a slip, words of evil nature".

It says that people with good habits who study propriety of conduct, even in lapsed conditions, will not speak unacceptable evil words.

Reference No: 044. Kural 1057 coming in Chapter 106 titled, "Begging-இரவு" tells about giving alms with kindness and courtesy.

"இகழ்ந்துஎள்ளாது ஈவாரைக் காணின் மகிழ்ந்துஉள்ளம்
உள்ளுள் உடைப்பது உடைத்து". (Kural 1057)

இகழ்ந்து எள்ளாமல் பொருள் கொடுப்பவரைக் கண்டால் இரப்பவரின் உள்ளம் மகிழ்ந்து உள்ளுக்குள்ளே உவகை அடையும் தன்மையுடையதாகும்.

"When the generous donates with no contempt
The beggar's heart is filled with delight".

Even the beggars feel happy and rejoice exceedingly, when they behold those who bestow their alms with kind words and courtesy. They praise the giver's kind act.

Reference No: 045. Kural 199 coming in Chapter 20 titled, "Not speaking vain words- பயன் இல சொல்லாமை" says about the avoidance of useless and harsh conversation.

"பொருள்தீர்ந்த பொச்சாந்தும் சொல்லார் மருள்தீர்ந்த
மாசறு காட்சி யவர்". (Kural 199)

மயக்கத்திலிருந்து தெளிந்த மாசற்ற அறிவை உடையவர், பயன் நீங்கிய சொற்களை ஒருகால் மறந்தும் சொல்லமாட்டார்.

"Men of clear wisdom and spotless vision
Even forgetfully utter not words in vain".

Wise men, even forgetfully, will not speak non-profitable words in their conversational speech and in expression.

Reference No: 046. Kural 200 in Chapter 20 titled, "Not speaking vain words-பயன் இல சொல்லாமை" talks about the useful and useless conversation.

"சொல்லுக சொல்லின் பயனுடைய சொல்லற்க
சொல்லின் பயனிலாச் சொல்". (Kural 200)

சொற்களில் பயன் உடைய சொற்களை மட்டுமே சொல்லவேண்டும்; பயன் இல்லாதவைகளாகிய சொற்களைச் சொல்லவே கூடாது.

"Always utter fruitful words
Never utter futile words".

He insists us to speak useful words and advices us to avoid using the useless words.

Reference No: 047. Kural 187 coming in Chapter 19 titled, "Not Backbiting-புறங்கூறாமை" tells about the failure to maintain friendship because of using insulting speech.

"பகச்சொல்லிக் கேளிர்ப் பிரிப்பர் நகச்சொல்லி
நட்பாடல் தேற்றா தவர்". (Kural 187)

மகிழும்படியாகப் பேசி நட்புகொள்ளுதல் நன்மை என்று தெளியாதவர் தம்மைவிட்டு நீங்கும்படியாகக் புறங்கூறி நண்பரையும் பிரித்துவிடுவர்.

"Who cannot foster friends thro' pleasing words
Lose friendship thro' slandering ones".

Only those who fail to understand the importance of communication in maintaining friendship will break even the existing good relationship by using insulting speech.

Reference No: 048. Kural 129 coming in Chapter 13 titled, "Self Control-அடக்கம் உடைமை" says about the consequences of insult.

"தீயினால் சுட்டபுண் உள்ளாறும் ஆறாதே
நாவினால் சுட்ட வடு". (Kural 129)

தீயினால் சுட்ட புண் புறத்தே வடு இருந்தாலும் உள்ளே ஆறிவிடும்; ஆனால் நாவினால் தீய சொல் கூறிச் சுடும் வடு என்றும் ஆறாது.

"Fire–burns will certainly heal inside
Tongue–burns won't but abide".

The injury caused by a burn will heal in course of time, but the agony caused by the thoughtless wounding words is never forgotten by the man who is hurt. Like an ugly scar, the insult will remain forever in his mind. This indicates that men can forget physical injuries but they rarely forget or forgive an emotional onslaught or social insult.

To avoid evil speech: Kural 35, 696, 567 and 568 from Reference 49 to 52.

Reference No: 049. Kural 35 coming in Chapter 4 titled, "Insistence on Virtue-அரண் வலியுறுத்தல்" insists to avoid evil speech which is a prerequisite for achieving Virtue.

"அழுக்காறு அவாவெகுளி இன்னாச்சொல் நான்கும்
இழுக்கா இயன்றது அறம்". (Kural 35)

பொறாமை, ஆசை, சினம், கடுஞ்சொல் ஆகிய இந்த நான்கு குற்றங்களுக்கும் இடங்கொடுக்காமல் அவற்றைக் கடிந்து ஒழுகுவதே அறமாகும்.

"Envy, greed, wrath and evil words –
It's virtue to shun these ills".

The conduct of virtue should be free from malice, desire, anger, and bitter speech. So, a good moral behavior requires the non involvement in all of these problem behaviors.

Reference No: 050. Kural 696 in Chapter 70, "Associating with Rulers- மன்னரை சேர்ந்து ஒழுகல்" also tells about appropriate speech for effective communication.

“குறிப்புஅறிந்து காலம் கருதி வெறுப்புஇல
வேண்டுப வேட்பச் சொலல்”. (Kural 696)

அரசருடைய குறிப்பை அறிந்து, தக்க காலத்தை எதிர்நோக்கி, வெறுப்பில்லாதவற்றையும் விருப்பமானவற்றையும் அவர் விரும்புமாறு சொல்லவேண்டும்.

“Watch his good mood and time, and then utter
What the king shuns not and likes better”.

The selection of right time, content, and situation for a good discussion are explained here. The acceptable points with pleasing words in appropriate language should be put to the king at the right time. The minister should be cautious not to bring any unpleasant response from the king.

Reference No: 051. Kural 567 in Chapter 57 titled, “Avoiding Oppression-வெருவந்த செய்யாமை” cautions and warns about the harsh speech used by the kings.

“கடுமொழியும் கைஇகந்த தண்டமும் வேந்தன்
அடுமுரண் தேய்க்கும் அரம்”. (Kural 567)

கடுமையான சொல்லும் முறைகடந்த தண்டனையும் அரசனுடைய வெற்றிக்குக் காரணமான வலிமையைத் தேய்க்கும் அரம் ஆகும்.

“Unkind speech and excessive penalities
Erode King’s winning power like files”.

It cautions about the king’s responsive actions to his citizens who give offensive and adverse feedback information report about the king’s administrative style and governance. The bitter words used by the king in anger for such feedback information and excessive punishments ordered by him for such feedback speech are like the mechanical tool ‘files’. Such anger will wear out the conquering power and

victory of kings. These two acts will reduce the king's courage and power of resistance against his enemies.

Reference No: 052. Kural 568 in Chapter 57 titled, "Avoiding Oppression-வெருவந்த செய்யாமை" also indicates the ill effects of harsh speech.

"இனத்துஆற்றி எண்ணாத வேந்தன் சினத்துஆற்றிச்
சீறின் சிறுகும் திரு". (Kural 568)

அமைச்சர் முதலான தன் இனத்தாரிடம் கலந்து எண்ணாத அரசன், சினத்தின் வழியில் சென்று சீறி நிற்பானானால், அவனுடைய செல்வம் சுருங்கும்.

"A king furious and indifferent to ministers
Will gradually lose all his fortunes".

Some kings may not consider the sincere advice of scholars and their subsequent actions may go wrong. At that time, he will get angry and may use harsh words which may affect their wealth and fame. So, to render a justice, the king has to have inputs from others and he should not get angry and use harsh words.

Incoherance between Speech and Actions: Kural 185, 183, 182 and 824 from Reference 53 to 56.

Reference No: 053. Kural 185 in Chapter 19 titled, "Not Backbiting-புறங்கூறாமை" also tells about the incoherence between speech and actions.

"அறம்சொல்லும் நெஞ்சத்தான் அன்மை புறம்சொல்லும்
புன்மையால் காணப் படும்". (Kural 185)

அறத்தை நல்லதென்று போற்றும் நெஞ்சம் இல்லாத தன்மை, ஒருவன் மற்றவனைப்பற்றிய புறங்கூறுகின்ற சிறுமையால் காணப்படும்.

"Who extols virtue openly but not in the heart
Is by mean backbiting exposed".

The behavior of a person who praise others in their presence and talk ill of them in their absence will not have coherence in his speech and actions. Such people do not follow the virtues in their life and it exposes their meanness.

Reference No: 054. Kural 183 coming in Chapter 19 titled,"Not Backbiting-புறங்கூறாமை" also tells about the incoherence between one's speech and actions.

"புறம்கூறிப் பொய்த்துஉயிர் வாழ்தலின் சாதல்
அறம்கூறும் ஆக்கம் தரும்". (Kural 183)

புறங்கூறிப் பொய்யாக நடந்து உயிர்வாழ்தலைவிட, அவ்வாறு செய்யாமல் வறுமையுற்று இறந்துவிடுதல்,அறநூல்கள் சொல்லும் ஆக்கத்தைத் தரும்.

"Death is better than a life of backbiting
As death brings virtue's blessing".

Talking ill of others in their absence, but talking good about them in their presence is a bad habit. By doing that, though they may get some benefit and live luxuriously, it leads to a false life. As it is not considered a virtue, they can rather die due to poverty instead of living that false life.

Reference No: 055. Kural 182 coming in Chapter 19 titled, "Not Backbiting-புறங்கூறாமை" also tells about the incoherence between speech and actions.

"அறன்அழீஇ அல்லவை செய்தலின் தீதே
புறன்அழீஇப் பொய்த்து நகை." (Kural 182)

அறத்தை அழித்துப்பேசி அறமல்லாதவைகளைச் செய்தலைவிட ஒருவன் இல்லாத இடத்தில் அவனைப் பழித்துப்பேசி நேரில் பொய்யாக முகமலர்ந்து பேசுதல் தீமையாகும்.

"Worse is to smile before and slander behind
Than to decry virtue and do deeds not good".

Praising somebody and smiling deceitfully in their presence, but then reviling him with destructive aim; are worse than directly decrying him. This will be considered as the destruction of every virtue and a greater evil than other sins.

Reference No: 056. Kural 824 in Chapter 83 titled, "Undesirable friendship- கூடா நட்பு" also tells about the similar idea.

"முகத்தின் இனிய நகாஅ அகத்துஇன்னா
வஞ்சரை அஞ்சப் படும்". (Kural 824)

முகத்தால் இனிமையாகச் சிரித்துப் பழகி அகத்தில் தீமை கொண்டுள்ள வஞ்சகருடன் நட்புக் கொள்வதற்கு அஞ்ச வேண்டும்.

"Fear cheats who smile sweeter in front
But are full of guile in their heart".

Anybody should fear to have friendship with the dangerous cheats with a deceitful smile on their face and not having any love in their heart. Tamil saint Chidambaram Ramalinga Adigalar (1973:4) in his book, 'Theivamanimaalai' also pointed out about this by saying that friendly relationship should not be developed with those who talk differently than what they think or intent.

Effects of evil and unbiased Speech: Kural 128, and 119 from Reference 57 to 58.

Reference No: 057. Kural 128 coming in Chapter 13 titled, "Self control-அடக்கம் உடைமை" says about the effects of evil speech.

"ஒன்றானும் தீச்சொல் பொருட்பயன் உண்டாயின்
நன்றுஆகா தாகி விடும்". (Kural 128)

தீய சொற்களின் பொருளால் விளையும் தீமை ஒன்றாயினும் ஒருவனிடம் உண்டானால், அதனால் மற்ற அறங்களாலும் நன்மை விளையாமல் போகும்.

"A single harmful word uttered
Turns all good things bad".

For a man, even a single attempt of using evil speech could have been productive. But, that alone is enough to spoil all his previous good deeds. It will project him to be evil in nature.

Reference No: 058. Kural 119 in Chapter 12 titled, "Impartiality-நடுவு நிலைமை" tells about unbiased speech.

"சொற்கோட்டம் இல்லது செப்பம் ஒருதலையா
உள்கோட்டம் இன்மை பெறின்". (Kural 119)

உள்ளத்தில் கோணுதல் இல்லாத தன்மையை உறுதியாகப் பெற்றால், சொல்லிலும் கோணுதல் இல்லாதிருத்தல் நடுவுநிலைமையாம்.

"Equity is words fully unbiased
Coming from a poised mind".

Only those who do not have crooked thinking in their mind, will have plain speech without any bias or deviation.

Power of Speech: Kural 647, 641, 635, 28, 682 and 564 from Reference 59 to 64.

Reference No: 059. Kural 647 in Chapter 65 titled, "Power of Speech-சொல்வன்மை" emphasizes the importance and excellence of speech skills.

"சொலல்வல்லன் சோர்வுஇலன் அஞ்சான் அவனை
இகல்வெல்லல் யார்க்கும் அரிது". (Kural 647)

தான்கருதியவற்றை நன்குசொல்லவல்லவனாய், சொல்லும்போதுசோர்வு இல்லாதவனாய், அஞ்சாதவனாய் உள்ளவனை, மாறுபாட்டால் வெல்வது யார்க்கும் முடியாது.

"An efficient tireless and fearless speaker
Is hard for anyone to conquer".

A convincing style of debate, untiring speech, good memory and fearlessness are the good qualities of a councillor which make him unconquerable. Visual or auditory modes are the main phases of memory and can be divided as short term or long term memory. Based on language functions, it is divided as verbal and non verbal memory. Fearlessness is the absence of nervousness and confusion during debate. It is said that whoever possesses faultless and fearless speech will win the race of power. This indicates that we have to be strong in our language so that we need not have the fear to speak. The restored edition of book, "The Story of My Life" by James Berger (2003:48) tells the life of Helen Keller, a noted achiever who had multiple disabilities. In that Helen Keller says, "One who is entirely dependent upon the manual alphabet has always a sense of restraint of narrowness. She also says that it is an unspeakable boon to her to be able to speak in winged words that need no interpretation".

Reference No: 060. Kural 641 in Chapter 65 titled,"Power of Speech-சொல்வன்மை" tells about speech excellence.

"நாநலம் என்னும் நலன்உடைமை அந்நலம்
யாநலத்து உள்ளதூஉம் அன்று". (Kural 641)

நாவன்மையாகிய நலம் ஒருவகைச் செல்வம் ஆகும்; அந்த நாநலம் தனிச்சிறப்புடையது. ஆகையால், மற்ற எந்த நலங்களிலும் அடங்குவது அன்று.

"The gift of the gab is the best of the gifts
And forms not part of other gifts".

The gift of having good persuasive speech is a unique positive skill of a person and is better than many other good qualities of him. He says that expressive power is an essential qualification for a successful councillor. We can understand the merit of the administrative set up of ancient Tamil kingdom from the fact that the correct

decisions were taken after a debate in the assembly. Even in those authoritative regimes of ancient monarchial Tamil kingdom, democratic principles and style of debate were much in practice. Important decisions were made on the outcome of debate. Even Aristotle's notion of skills indicates that speech was divine.

Reference No: 061. Kural 635 coming in Chapter 64 titled, "Ministry-அமைச்சு"

states about the importance of language skill expertise for ministers.

"அறன்அறிந்து ஆன்றுஅமைந்த சொல்லான்எஞ் ஞான்றும்
திறன்அறிந்தான் தேர்ச்சித் துணை". (Kural 635)

அறத்தை அறிந்தவனாய், அறிவு நிறைந்து அமைந்த சொல்லை உடையவனாய், எக்காலத்திலும் செயல்செய்யும் திறன் அறிந்தவனாய் உள்ளவன் ஆராய்ந்து கூறும் துணையாவான்.

"Choose as minister an able man who is virtuous,
Capable of wise counsel and executing tacts".

A person with plenty of good virtues, high academic thinking, good knowledge, superior and sagacious vocabulary and excellent action for skill achievement are considered to be fit for any ministerial job. He can well understand the duties and needs of the king, and offer him the best administrative support and help. Since he can tender the most required advice on right governance, he can be a good helper and companion to the king at any time.

Reference No: 062. Kural 28 coming in Chapter 3 titled, "The greatness of Ascetics-நீத்தார் பெருமை" says about effective Speech and Language.

"நிறைமொழி மாந்தர் பெருமை நிலத்து
மறைமொழி காட்டி விடும்". (Kural 28)

பயன்நிறைந்த மொழிகளில் வல்ல சான்றோரின் பெருமையை, உலகத்தில் அழியாமல் விளங்கும் அவர்களுடைய மறைமொழிகளே காட்டிவிடும்.

"The glory of the learned is amply revealed
In the scriptures of their land indeed".

Since Speech and Language can be a measuring yardstick to know one's academic and social strength, his fame will depend on his communication. So, it is mandatory to improve that function.

Reference No: 063. Kural 682 in Chapter 69 titled, "Envoy- தூது" also talks about effective speech and language.

"அன்புஅறிவு ஆராய்ந்த சொல்வன்மை தூதுஉரைப்பார்க்கு
இன்றி யமையாத மூன்று". (Kural 682)

அன்பு, அறிவு, ஆராய்ந்து சொல்கின்ற சொல்வன்மை ஆகிய இவை தூது உரைப்பவர்க்கு இன்றியமையாத மூன்று பண்புகளாகும்.

"Kindness, Intelligence and astute eloquence
These three are an envoy's essential traits".

Devotion to one's sovereign nation, a thorough knowledge of its prevailing politics, and a discriminative power for effective speech are the absolute and essential qualifications for all envoys.

Reference No: 064. Kural 564 in chapter 57 titled "Avoiding Oppression- வெருவந்த செய்யாமை" talks about kings who get negative feedback from his citizens.

"இறைகடியன் என்றுஉரைக்கும் இன்னாச்சொல் வேந்தன்
உறைகடுகி ஒல்லைக் கெடும்". (Kural 564)

'நம் அரசன் கடுமையானவன்' என்று குடிகளால் கூறப்படும் கொடுஞ் சொல்லை உடைய வேந்தன், தன் ஆயுள் குறைந்து விரைவில் கெடுவான்.

"Our king is cruel," when subjects complain
His life and wealth shall swiftly decline".

The king, who is considered and spoken of as cruel will perish quickly. His life will be shortened and he will soon meet his own destruction.

Speech, Numbers, and Alphabets: Kural 1, 392, 643, 648 and 642 from Reference 65 to 69.

Reference No: 065. Kural 1 in Chapter 1 titled, "Glory of God- கடவுள் வாழ்த்து" gives Godly status to language.

"அகர முதல எழுத்தெல்லாம் ஆதி
பகவன் முதற்றே உலகு". (Kural 1)

எழுத்துக்கள் எல்லாம் அகரத்தை அடிப்படையாகக் கொண்டிருக்கின்றன. அதுபோல் உலகம் கடவுளை அடிப்படையாகக் கொண்டிருக்கின்றது.

"A, is the beginning of all alphabets
God is the origin of the universe".

The importance of language is evident in the very first kural on invocation itself. In that an analogy of alphabet and the basic syllable of Tamil language is given to express God. The language structures help a person to form cognitive ideas and to transform and express this mental process into meaningful words. This includes the processes of understanding, thinking, talking, reading, and writing. As 'அ (a)' is the first letter of Tamil alphabets, the world starts with the eternal God as its first personality. 'அ' which is equivalent to 'a' in English will assume its original sound when it is alone and will also take another form depending on the adjoining sound. Subramaniyan S.V. (2005:28) in his explanation about 'Nool marabu' in 'Ezhthathikaaram' of Tholkappiam book also points out that 'a- அ' is the first letter in

Tamil language. The example of alphabets given by Valluvar to Godly status indicates the importance he has bestowed on language structure.

Reference No: 066. Kural 392 in Chapter 40 titled, "Learning- கல்வி" explains the importance of Numbers and Letters.

> "எண்எண்ப ஏனை எழுத்துஎன்ப இவ்விரண்டும்
> கண்என்ப வாழும் உயிர்க்கு". (Kural 392)

எண் என்று சொல்லப்படுவன, எழுத்து என்று சொல்லப்படுவன ஆகிய இருவகைக் கலைகளையும் வாழும் மக்களுக்குக் கண்கள் என்று கூறுவர்.

> "Numbers and letters, according to scholars
> Are the two eyes of all human beings".

This kural makes a specific reference to both the numbers and letters. Numbers are the basics of mathematics, and the letters are the basics of literary creations. He says that letters and numbers can enhance one's language, knowledge and thinking. The number calculations and the literary skills which can improve one's soft skills are considered as two eyes and found to be important behaviors. They are considered to be the precious possession of mankind. So, it becomes a must and essential to skillfully learn both of these specialized human skills. Kulandaiswamy V.C. (2002:39-44) explains, "one can perceive Valluvar's extraordinary understanding and vision in looking into the future as well as into the nature of challenge and progress that human society may undergo. One could see that Valluvar places numbers in the first place and letters in the second in the order. The use of the specific expression 'the other one' for the letters fairly well indicates that such a note may be deliberate or at least Valluvar does give in this kural something of a pride of a place to the discipline of mathematics as represented by numbers. Till recently, while speaking of education; letters obviously dominated the scene and mathematics as a

discipline was neither pervasive nor as prestigious as to give numbers a pride of place. But when we take a closer look at this issue, it becomes obvious that in the modern world; the entire progress we have made in Science and Technology is based on mathematics and not on words. All the scientific concepts in physical and natural sciences are based on numbers. Even many of the philosophers and thinkers of the past were great mathematicians themselves. Including many of the sophisticated computers and many other tools which man invented are based on mathematical principles. The mathematical contribution made in the 19th and 20th centuries is enormous and the power and beauty of it is well recognized today. So, one may reasonably assume that when Valluvar said numbers and the 'other one' for letters, he has done deliberately with an understanding of the significance of mathematics. The Tamil word 'எண்' represents the words equivalent for number, mathematics, mind and also thought. He says that it is astonishing and even intriguing that the Tamils have chosen to use the same word for numbers, mind, thought and mathematics."

Reference No: 067. Kural 643 in Chapter 65 titled, "Power of Speech-சொல்வன்மை" says about the attractive speech.

"கேட்டார்ப் பிணிக்கும் தகைஅவாய்க் கேளாரும்
வேட்ப மொழிவதாம் சொல்". (Kural 643)

சொல்லும்போது கேட்டவரைத் தன் வயப்படுத்தும் பண்புகளுடன், கேட்காதவரும் கேட்க விரும்புமாறு கூறப்படுவது சொல்வன்மையாகும்.

"What holds the audience spellbound and reach
Others and make them long for, is a Speech".

A speech by a good orator should bind the relationship and hold on the listener. Even to the unconvinced audience; it should be pleasing in nature. Speech

should be delivered in such a way that even his enemies or opponents should desire to hear him and like to have his friendship.

Reference No: 068. Kural 648 in chapter 65 titled, “Power of Speech-சொல்வன்மை” says about the merit of coherence and versatility in speech.

“விரைந்து தொழில்கேட்கும் ஞாலம் நிரந்துஇனிது
சொல்லுதல் வல்லார்ப் பெறின்”. (Kural 648)

கருத்துக்களை ஒழுங்காகக் கோர்த்து இனிமையாகச் சொல்ல வல்லவரைப் பெற்றால், உலகம் விரைந்து அவருடைய ஏவலைக் கேட்டு நடக்கும்.

“The world will always be quick to execute
The words that are sweetly well set”.

The world would readily accept those who can speak on various subjects in proper order and in a pleasing manner. The world will not lose time to follow such a rare speaker who has strong ideas with orderly coherence and with sweet expression.

Reference No: 069. Kural 642 in Chapter 65 titled, “Power of Speech-சொல்வன்மை” say about the positive and negative impact of Speech.

“ஆக்கமும் கேடும் அதனால் வருதலால்
காத்துஓம்பல் சொல்லின்கண் சோர்வு.” (Kural 642)

ஆக்கமும் கேடும் சொல்கின்ற சொல்லால் வருதலால் ஒருவன் தன்னுடைய சொல்லில் தவறு நேராமல் காத்துக் கொள்ள வேண்டும்.

“Gain or loss depends on one’s words
So guard against slip in words”.

Valluvar says that speech can determine one’s success to bring wealthy gain or failure by resulting in evil loss. Even the prosperity or the ruin of the whole nation can be determined by diplomatic speech. So, ministers should be careful in guarding

themselves against faulty speech, unwanted comments, or defective orders. At domestic level, this idea gives a clue to students and job seekers while facing the examination or personal interviews. They should avoid confusion, and getting into speech defects.

Easy to preach and hard to practice: Kural 664 and 514 from Reference 70 to 71.

Reference No: 070. Kural 664 in Chapter 67 titled, "Firmness in action-வினைத்திட்பம்" says about difficulties in transforming Speech into activities.

"சொல்லுதல் யார்க்கும் எளிய; அரியவாம்
சொல்லிய வண்ணம் செயல்." (Kural 664)

இச்செயலை இவ்வாறு செய்து முடிக்கலாம் என்று சொல்லுதல் எவர்க்கும் எளியனவாம்; சொல்லியபடிச் செய்து முடித்தல் அரியனவாம்.

"It is always easy to preach something
But hard to practice the same thing".

Though it is easy to tell the instructions about how an act to be performed, it is very difficult for anyone to implement those instructions into positive and fruitful actions. Only exceptionally good men can carry out their plans to fulfillment.

Reference No: 071. Kural 514 in Chapter 52 titled "Evaluating and Employing-தெரிந்து வினையாடல்" talks about molding or tuning a person for a specific job.

"எனைவகையான் தேறியக் கண்ணும் வினைவகையான்
வேறுஆகும் மாந்தர் பலர்". (Kural 514)

எவ்வகையால் ஆராய்ந்து தெளிந்த பிறகும் (செயலை மேற்கொண்டு செய்யும்போது) அச்செயல் வகையால் வேறுபடும் மக்கள் உலகத்தில் பலர் உண்டு.

"Men may pass all tests, yet they vary
In their ways of discharging duty".

Even when a king tries a person to be in a specific job, there are many instances where they change or shift from their original employment position. In bringing out the skill excellence, not only the constant training but also their aptitude plays a big role. Narayana Rao S. (2007:281) says, "… the tremendous technological progress may create problems of obsolescence or unemployment where the government could suggest the two approaches of 'recyclage' or 'encyclage'. In 'recyclage', refresher courses can be planned for new tasks in the existing job and in 'encyclage' training can be given to undertake new careers". Even in taking up the responsibility of designing and applying an intervention program for communication problem, Deena K. Bernstein (1989:208,226) quotes James McLean as saying, "it is an awesome task. Designing a successful technique to meet the individual needs is a big challenge for any professional. The communication intervention is not a simple procedure or technique, but is an interactive process where professionals constantly examine their knowledge for designing a proper tool. Spotting the individual interest and intervening with correct application can be a deciding factor to achieve success". It indicates that both in vocational placement and also in therapeutic rehabilitation, eclectic approach is required.

Non-Verbal Communication: Kural 1100, 1274, 1271, 701, 1253, 1203, 1312, 1317, 1318, 271, 1040 and 621 from Reference 72 to 83.

Reference No: 072. Kural 1100 in chapter 110 titled, "Divining the Heart-குறிப்பு அறிதல்" say about the eye contact.

> " கண்ணொடு கண்ணிணை நோக்குஒக்கின் வாய்ச்சொற்கள்
> என்ன பயனும் இல". (Kural 1100)

கண்களோடு கண்கள் நோக்கால் ஒத்திருந்து அன்பு செய்யுமானால் வாய்ச்சொற்கள் என்ன பயனும் இல்லாமற் போகின்றன.

"When eye to eye lovers lock their looks,
Spoken words are of no use".

Though it was addressed to lovers, it is applicable for others also. When there is perfect agreement between the eyes, the words of the mouth become useless. Since visual clues can express a lot of ideas than what words otherwise would tell, a good 'eye contact' can be more expressive in nature to communicate ideas. In the book by Katz J. (1985:1001), Miriam Krantz says, "the parent's communication intent can be conveyed visually from a distance when it may be outside the child's auditory range. Visual attention may prompt vocal imitation and also lead to speech reading". The book by Roberta Chapey (1986:349) cites Egolf and Chester to tell,"Non-verbal communication techniques include organismics, cosmetics, oculesics, and haptics. Here oculesics refers to the use of eyes in communication". The book by Howard S.Friedman (2006:495) quotes Woodrow Wyatt as saying that a man falls in love through his eyes, a woman through her ears.

Reference No: 073. Kural 1274 in Chapter 128 titled, "Revealing the Mind- குறிப்பு அறிவுறுத்தல்" say about the silent expressive smile.

"முகைமொக்குள் உள்ளது நாற்றம்போல் பேதை
நகைமொக்குள் உள்ளதுஒன்று உண்டு". (Kural 1274)

அரும்பு தோன்றும்போது அடங்கியிருக்கும் மணத்தைப்போல், காதலியின் புன்முறுவலின் தோற்றத்தில் அடங்கி இருக்கும் குறிப்பு ஒன்று உள்ளது.

"Certain secret lies in the smile of the artless maid
Like the latent fragrance in a bud".

As the flower bud contains fragrant smell, the immature smile of a maid can express some messages which can be inferred by the partner.

Reference No: 074. Kural 1271 in Chapter128 titled, "Revealing the Mind-குறிப்பு அறிவுறுத்தல்" say about the expression of body language.

"சுரப்பினுங் கையிகந் தொல்லாநின் உண்கண்
உரைக்கல் உறுவதுஒன்று உண்டு". (Kural 1271)

நீ சொல்லாமல் மறைத்தாலும் நிற்காமல் உன்னைக் கடந்து உன்னுடைய கண்கள் எனக்குச் சொல்லக் கூடிய செய்தி ஒன்று இருக்கின்றது.

"Though you hide something, there is a secret
Your eyes expose breaking restraint".

Though one would like to conceal his inner feelings and avoid expressing the intentions overtly, his disturbed eyes will expose some underlying facts that are happening in real life situations. One will not be able to fully hide all the real facts of expressions. They transgress their limited boundaries and the powerful eyes will reveal the suppressed feelings and facts of life. In addition to spoken words, other body parts like eyes and face are capable of producing the similar or enough expressions. This may be the reason why it is called "Face is the index of mind". So, to avoid expressing these conflicting and contradictory expressions; it is warranted to keep our thoughts, speech and actions together in harmony of same wavelength.

Reference No: 075. Kural 701 in Chapter 71 titled, "Mind-Reading-குறிப்பு அறிதல்" tells about body language.

“கூறாமை நோக்கிக் குறிப்பறிவான் எஞ்ஞான்றும்
மாறாநீர் வையக் கணி” (Kural 701)

ஒருவர் சொல்லாமலே அவருடைய முகத்தை நோக்கி அவர் கருதிய குறிப்பை அறிகின்றவன் எப்போதும், உலகத்திற்கு ஓர் அணிகலன் ஆவான்.

“Whoever can read another’s unspoken mind
Is a jewel of the sea-locked world”.

Even in the absence of verbal communication and just by looking at king’s face; the minister should have the capacity to read, infer, and understand his ideas. Such a clear and good understanding capacity will be the main quality of a skilled minister and such persons are the gift to the world. Though body language is effective, because of its abstractness, it is difficult to understand.

Krishna Mohan and Meera Banerji (1990:9) tell that visible codes are essential to acquire the skill of effective communication. As quoted by them, Bird Whistell opines that thirty five percent of the message is carried verbally, while sixty five percent is conveyed nonverbally. So training in the proper use of the visible code is essential to acquire the skill of effective communication and it can compensate for the difficulties in verbal communication. The following are the elements of visible codes:

1) Personal appearance: Specific dress codes are prescribed for occasions like convocation, etc. Hairstyle and make up also reflect individual personality.
2) Posture: A correct posture can determine the success of one’s speech.
3) Gestures: Correct use of gestures can help in achieving the effective speech.
4) Facial expression: Facial expression of the speaker and the feedback response of the listener can add meaning to the verbal conversation.
5) Eye contact: Both the sincere speaker and the interested listener will maintain good eye contact.

6) Space distancing: It differs across culture, the nature of the listener and the type of crowd.

Since visible codes are as important as that of verbal codes, the focus of training for communication should be on both aspects. But a proper care should be taken to use the appropriate symbols in cross cultural contexts. Even in persons with hearing impairment, lip reading and gestures play an important role in communication.

Reference No: 076. Kural 1253 in Chapter 126 titled, "Losing Self-Restraint- நிறை அழிதல்" talks about difficulty in controlling the lust.

"மறைப்பேன்மன் காமத்தை யானோ குறிப்பின்றித்
தும்மல்போல் தோன்றி விடும்". (Kural 1253)

யான் காமத்தை என்னுள் மறைக்க முயல்வேன்; ஆனால் அதுவே என் குறிப்பின்படி நிற்காமல் தும்மல்போல் தானே வெளிப்பட்டுவிடுகின்றது.

"How can I conceal my passion that exposes
Itself like a sneeze coming unawares? "

This tells about difficulty in controlling the lust and it is as difficult as controlling the involuntary sneeze. It cannot be concealed and is beyond our volitional control.

Reference No: 077. Kural 1203 in Chapter 12, "Sad memories of Love- நினைந்து அவர் புலம்பல்" say about the dilemma of thought process among loving partners.

"நினைப்பவர் போன்று நினையார்கொல் தும்மல்
சினைப்பது போன்று கெடும்". (Kural 1203)

தும்மல் வருவதுபோலிருந்து வாராமல் அடங்குகின்றதே! என் காதலர் என்னை நினைப்பவர் போலிருந்து நினையாமல் விடுகின்றாரோ?

"My lover seemed to think of me but forgot
For I felt like sneezing but could not"

Sometimes a threatened sneeze may vanish. But this interruption may result in doubting the lover's thought process. The dilemma may arise because of the difficulty in fixing the target personality for causing the sneeze. In Tamil culture, it is a belief that sneezes is usually triggered by somebody who remembers us.

Reference No: 078. Kural 1312 in Chapter 132 titled "Nuances of Sulking- புலவி நுணுக்கம்" talks about Sneeze.

"ஊடி இருந்தேமாத் தும்மினார் யாம்தம்மை
நீடுவாழ்க என்பாக்கு அறிந்து". (Kural 1312)

காதலரோடு ஊடல் கொண்டிருந்தோமாக, யாம் தம்மை நெடுங்காலம் வாழ்க என்று வாய் திறந்து சொல்லுவோம் என நினைத்து அவர் தும்மினார்.

"He sneezed in the course of my sulking
Thinking I would say, Live long! ".

Usually when someone sneezes, we bless them with a greeting message to live long. By this, we express our wishes or interest by non speech activities like a sneeze. But, when lovers are in feigned anger, they do not usually speak freely with each other. At that time, one may like to attract the attention of the partner. So, to have a breakthrough with an expected utterance of the blessing message; one may come out with a sneeze. Here, the temporarily suspended communication is expected to begin with a non verbal act of sneeze.

Reference No: 079. Kural 1317 in Chapter132 titled, "Nuances of Sulking-புலவி நுணுக்கம்" also talks about Sneeze.

"வழுத்தினாள் தும்மினே னாக அழித்துஅழுதாள்
யார்உள்ளித் தும்மினீர் என்று." (Kural 1317)

யான் தும்மினேனாக அவள் 'நூறாண்டு' என வாழ்த்தினாள்; உடனே அதைவிட்டு யார் நினைத்ததால் தும்மினீர்? என்று கேட்டு அழுதாள்.

"I sneezed She blessed; but soon She cried
Who thought of you and you sneezed".

When the male partner sneezed, she blessed him. Immediately she had her doubt about his integrity of the target lady figure which triggered his sneeze. She was not confident of her own role in triggering his sneeze. That anger was so much deep that she could not stop her cry.

Reference No: 080. Kural 1318 in Chapter 132 titled, "Nuances of Sulking- புலவி நுனுக்கம்" also talks about Sneeze.

"தும்முச் செறுப்ப அழுதாள் நுமர்உள்ளல்
எம்மை மறைத்தீரோ என்று." (Kural 1318)

அவளுடைய ஊடலுக்கு அஞ்சி யான் தும்மலை அடக்கிக்கொள்ள 'உம்மவர் உம்மை நினைப்பதை எமக்குத் தெரியாமல் மறைக்கின்றீரோ' என்று அழுதாள்.

"I suppressed my sneeze; She wept saying
"Who are you now concealing?".

When he suppressed his sneeze, she doubted her lover's intention and started crying. She thought that he suppressed his sneeze to hide his thoughts about some other lady. On many occasions, nonverbal communication is abstract in nature and does not express ideas explicitly which results in mistaken notions.

Reference No: 081. Kural 271 in Chapter 28 titled “Improper conduct- கூடா ஒழுக்கம்” talks about smile.

“வஞ்ச மனத்தான் படிற்றொழுக்கம் பூதங்கள்
ஐந்தும் அகத்தே நகும்”. (Kural 271)

வஞ்சமனம் உடையவனது பொய்யொழுக்கத்தை அவனுடைய உடம்பில் கலந்துநிற்கும் ஐந்துபூதங்களும் கண்டு தம்முள் சிரிக்கும்.

“Body’s five elements laugh to themselves
At the lying conduct of pretenders”.

One may have falsehood in his heart and secretly break the law of celibacy. But the five senses in our body as witnesses of watching our secret and shameful crime, will laugh at us for doing the futile fraud and for living a false life. It implies that we have to answer our conscience. Thus, laughter / smile can also be used for nonverbal Communication.

ReferenceNo: 082. Kural 1040 in Chapter104 titled, “Farming-உழவு” also talks about smile.

“இலம்என்று அசைஇ இருப்பாரைக் காணின்
நிலம்என்னும் நல்லாள் நகும்.” (Kural 1040)

எம்மிடம் ஒரு பொருளும் இல்லை என்று எண்ணி வறுமையால் சோம்பியிருப்பவரைக் கண்டால், நிலமகள் தன்னுள் சிரிப்பாள்.

“The earth, the good maiden, will laugh surely,
If idlers are idle on the plea of penury”.

Since laziness can lead to poverty, it is foolish to bewail one’s destiny and remain idle and poor. By looking at such foolish nonproductive act, the maiden earth will laugh at them. Here, smile is used for nonverbal communication.

Reference No: 083. Kural 621 coming in Chapter 63 titled, "Fortitude-இடுக்கண் அழியாமை" tells about having the optimistic approach even during difficult times.

"இடுக்கண் வருங்கால் நகுக;அதனை
அடுத்துஊர்வது அ∴துஒப்பது இல்". (Kural 621)

துன்பம் வரும்போது (அதற்காகக் கலங்காமல்) நகுதல் வேண்டும். அத்துன்பத்தை நெருங்கி எதிர்த்து வெல்ல வல்லது அதைப்போனறது வேறு இல்லை.

"Laugh away the trouble when it comes
Nothing equals it to conquer pains".

Kural instructs us to laugh when we meet unfortunate events or when we get into trouble. There is nothing like that of laugh, to overcome the difficulties and to drive away the sorrow. This positive attitude will help us to achieve the victory.

Reading skills: Kural 683 and 783 from Reference No: 84 to 85.

Reference No: 084. Kural 683 in Chapter 69 titled, "Envoy-தூது" says about the required reading abilities of envoys.

"நூலாருள் நூல்வல்லன் ஆகுதல் வேலாருள்
வென்றி வினையுரைப்பான் பண்பு". (Kural 683)

அரசனிடம் சென்று தன் அரசனுடைய வெற்றிக்குக் காரணமான செயலைப்பற்றித் தூது உரைப்பவன் திறம், நூலறிந்தவருள் நூல் வல்லவனாக விளங்குதல் ஆகும்.

"A scholar among scholars tells another ruler
The deeds that caused success to his leader".

The envoys are often expected to converse well with the powerful enemy kings about different challenging matters. In ultimate, they should aim at the victory for their home country. These ambassadorial topics may be discussed well in detail in

the court-room with officials from various departments. Sometimes it may be a sensitive matter for both the countries. So, to keep in pace with all other learned persons and their genuine expectations in the kingdom; the envoy should have good knowledge about the overall activities happening in these two countries. The knowing of real happenings and latest knowledge in-depth about all the ethical issues and strong political matters will make him more powerful and strong. To make him such a strong personality with ultimate success in his political mission, the envoy should go in for lot of reading to gain knowledge. The acquisition of such a reading skills will place him one step above of all other learned political personalities. So, this 'reading skill' will be the main and most wanted capability of the envoys. Alan G. Kamhi (1989: XI) quotes Gibson and Levin with, "the ability to read well is the basis for success in school and later in life. There is widespread evidence that children who are slow to acquire oral language are likely to have difficulty in learning written language as well". Avinashilingam T.S (1975:41) quotes Sri Ramakrishna Paramahamsa who said, "… mere book learning is of no use. One should rather acquire the wisdom which illumines the heart, gaining which one would feel satisfied forever."

Reference No: 085. Kural 783 in Chapter 79 titled, "Friendship-நட்பு" also tells the importance of reading.

> "நவில்தொறும் நூல்நயம் போலும் பயில்தொறும்
> பண்புடை யாளர் தொடர்பு". (Kural 783)

பழகப் பழக நற்பண்பு உடையவரின் நட்பு இன்பம் தருதல்; நூலின் நற்பொருள் கற்கக் கற்க மேன்மேலும் இன்பம் தருதலைப் போன்றதாகும்.

> "Close amity of the noble brings more delight,
> As repeated reading brings more insight".

He compares the act of continuously maintaining the good friendly relationship with noble persons, to that of readings of good books. With repeated readings of a book in depth, one can see more beauty in it and can derive enhanced pleasure. Likewise, if a good friendship is continued, it will give increased pleasure. If such a good friendship is cultivated, it becomes more delightful and useful.

Optimum function: Kural 475, 479, 480, and 476 from Reference 86 to 89.

Reference No: 086. Kural 475 in Chapter 48 titled, "Assessing the Strength - வலி அறிதல்" reveals the breakdown due to overload and overstrain.

"பீலிபெய் சாகாடும் அச்சுஇறும் அப்பண்டம்
சால மிகுத்துப் பெயின்". (Kural 475)

மயிலிறகு ஏற்றிய வண்டியே ஆனாலும், அந்தப் பண்டமும் (அளவோடு ஏற்றாமல்) அளவுகடந்து மிகுதியாக ஏற்றினால் அச்சு முறியும்.

"Tho'a cart carries light peacock feathers
Its axle breaks if the load exceeds".

Too great a load of articles, even if it is light weight as peacock's feathers, will break the axle of a bandy cart. Hereby a warning is given to excessive use or abuse of an activity. A misuse of an object over and above the permissible capacity or tolerant level of functional limit, or energy will collapse and break. Such a breakdown may also cause physical or functional difficulties in Speech and Hearing skills. The typical voice patients with hyper functions may speak much louder, with more effort and more strain. In the book by Norman J. Lass (1988:822), Boone was cited to say, "elimination or reduction of vocal abuse will be effective in eliminating the dysphonia and its accompanying laryngeal pathology". Even the indiscriminate inclusion and enrolment of all categories of children in an academic program where a foreign

language is the medium of instruction, can cause under achievement by some students. For children with developmental delay, this type of extra pressure can result in stammering, misarticulations and even delay in speech and language functions. The problems like normal non-fluency which are seen during developmental period can surface and become worse because of this over expectation and extra pressure. Even spastic dysphonia can be the offshoot of this type of emotional stress and related problem. In the book by Jack Katz (1985:721), William Melnick was quoted as saying that the link between the existence of noise in the environment and the production of hearing loss in people working in that environment is beyond question. Shelley E Taylor (2006:99,102) in her book quotes Kopelman's report that obesity is becoming a global epidemic. In the same book, Dietz is also quoted as saying that being overweight in childhood must now be considered a major health problem rather than merely a problem in appearance.

Reference No: 087. Kural 479 in Chapter 48 titled, "Assessing the Strength - வலி அறிதல்" says about optimum functioning without any abuse or misuse of resources.

> "அளவுஅறிந்து வாழாதான் வாழ்க்கை உளபோல
> இல்லாகித் தோன்றாக் கெடும்". (Kural 479)

பொருளின் அளவு அறிந்து வாழாதவனுடைய வாழ்க்கை (பல வளமும்) இருப்பதுபோல் தோன்றி இல்லாமல் மறைந்து கெட்டுவிடும்.

> "Lavish life of one who lives not within means
> Though grand, perishes without traces".

The prosperity of persons who live without knowing the available measure of their property will perish even while it appears to continue. We have to limit our day today expenses according to our income resources. Similar concepts hold good in

speech and hearing science also. If we do not use our voice properly and go well beyond the optimum level, we may loose or disturb our voice. Voice produced regularly with residual air may result in vocal abuse and may result in aphonia or dysphonia. Even the over-expectation of speech and language output from very young children may cause normal non-fluency, Misarticulations or behavior problems. So, in any activity including Speech and Hearing field, we have to know our optimum functioning limits to enjoy the best results**.**

Reference No: 088. Kural 480 in Chapter 48 titled, "Assessing the Strength- வலி அறிதல்" also says about optimum functioning.

> "உளவரை தூக்காத ஒப்பரவு ஆண்மை
> வளவரை வல்லைக் கெடும்". (Kural 480)

தனக்குப் பொருள் உள்ள அளவை ஆராயாமல் மேற்கொள்ளும் ஒப்புரவினால், ஒருவனுடைய செல்வத்தின் அளவு விரைவில் கெடும்.

> "One's wealth gained swiftly depletes
> If bounty exceeds the limits".

If liberal spending weigh more than the measure of one's income or property, his wealth will quickly perish. Even the donations to any cause or hospitality services to others should be made according to the availability of his funds and other resources. Likewise in communication also, we have to weigh our strength and weaknesses and converse accordingly for proper functioning.

Reference No: 089. Kural 476 in chapter 48 titled, "Assessing the Strength-வலி அறிதல்" also says that we have to know our limits and go for optimum functioning.

"நுனிக்கொம்பர் ஏறினார் அஃதுஇறந்து ஊக்கின்
உயிர்க்குஇறுதி யாகி விடும்." (Kural 476)

ஒரு மரத்தின் நுனிக்கொம்பில் ஏறியவர், அதையும் கடந்து மேலும் ஏற முனைந்தால், அவருடைய உயிர்க்கு முடிவாக நேர்ந்துவிடும்.

"Climbing a tree beyond the tip of a branch
Will be the end of life very much".

If a tree climber is more enthusiastic and ventures to go well beyond the critical point in a branch, he may land up in an accident and even end his life. Like that, carrying out an aggressive activity too far may result in failures. We have to know our capacity and do things within that limit. Even while using the breath for voice production, we should not go for residual air because it may result in vocal abuse and subsequent aphonia or dysphonia.

Poor Memory:

Reference No: 090. Kural 534 in Chapter 54 titled, "Not forgetting duty- பொச்சாவாமை" says that inspite of having adequate wealth; people with poor memory will not achieve greater heights of development.

"அச்ச முடையார்க்கு அரண்இல்லை ஆங்கில்லை
பொச்சாப்பு உடையார்க்கு நன்கு." (Kural 534)

உள்ளத்தில் அச்சம் உடையவர்க்குப் புறத்திலே அரண் இருந்து பயன் இல்லை; அதுபோல் மறதி உடையவர்க்கு நல்ல நிலை வாய்த்தும் பயன் இல்லை.

"As no fortress is fruitful for the fearful
No fortune is useful for the forgetful".

As the coward has no defense by whatever fortifications he may be surrounded with, people with poor memory will not succeed in their actions inspite of all other help. In spite of possessing many other advantages, they may not achieve the best

results. This perspective of Thiruvalluvar can explain the speech defects faced by children with cognitive challenges, in whom poor memory and lack of attention are manifested. Even in people with stammering, their speech is not fluent mainly because of fear, anxiety, and lack of confidence. If they face the challenges boldly, they will come out successfully with a fluent speech. Thus a good account of speech, language and related areas as expressed by Thiruvalluvar were seen. In the next part, Thirukkurals relating to Hearing and other Sensory inputs along with the related literature are given. It will help us to understand better about the Kural values.

Sensory Avenues: Before going into specific Kural information, a general note on sensation is given herewith for reference. Our five sense organs register signals and enable us to interact with the environment in an amazing way. These sense organs get perceptual inputs for getting information and gaining knowledge. Sensations are seen in all living organisms including plants. While the one-celled animals have simple senses, some animals have senses that are far more powerful and superior than human beings. Dogs and cats can hear even ultrasounds, whereas human beings will fail to hear to that extent. Sharks can smell even one drop of blood in large quantity of water. Identification and foretelling capacity of dangers like earthquakes etc can be perceived by certain animals and birds even with minimal or small sensory inputs. They can sense their environment when it becomes too cold or too hot and then move away accordingly to a convenient and safe place with appropriate intervention.

Sensory functions and stimulation: The functions of different sense organs vary in a fascinating manner and work in a complex way. All these senses are important for communication and also for our safety. Sight helps us to avoid hitting against an object. Hearing helps us to get meaningful signals including dangerous emergencies.

Smell helps to analyze the atmosphere and to enjoy the pleasant smell or to avoid the dirt and smoke. Taste enables us to differentiate the good or rotten food. Touch gives clues to appreciate the texture of an object and the warmth of hot sun. Sensory processing theories are heavily based on the influence of the five "typical" senses as well as the interceptive, vestibular, and proprioceptive senses. Sensory stimulation and interaction with the environment is critical to maintain the highest level of awareness and connection with others. Senses act as learning tools and give us either positive or negative feedback. Lenard J.Davis (1997:87) cites Margaret A.Winzer in which Aristotle is said to have taught that nothing can exist in the human mind that has not received any signal through the senses.

Sensory stimulation and brain function: Sensory integration is more complex than sensory stimulation and it involves the active participation of the individual and also his cognitive functions. Stimulus input becomes the basic need for both intellectual and communication development. This goes well with Piaget view which is quoted in the book by Donna E Nortan (1985:23, 24). Piaget says that interaction with his physical and social environment is critical to both intellectual and language development of the child. In the book by Donna E Nortan (1985:24), Raven and Salzer is quoted as saying that during the sensory-motor period which is from birth to two years, children should manipulate objects and materials to enable them to develop images and to stimulate their cognitive function and its growth. Sensory and motor activities are considered necessary for developing good concepts and complex thinking. During the first phase of pre-conceptual period, it is important to provide many varied concrete experiences between two to four years. In the next intuitive phase of pre-operational period which is from four years to seven years, it is desirable

for the children to follow the activity oriented curriculum. Interaction with different materials will help to explore the environment.

Brain is one of the few important organs that are not fully developed at the time of birth. Hence, the entire potential of the brain can not be expressed or used at that stage. Jacqueline Chinappi (2012: web dt. 8-7-15) reported Sarah Malburg as saying that the infant's brain has the ability to grow at an impeccable rate. Though it is one quarter of its adult size at birth, it will grow to be eighty percent of an adult size at the age of three years. By the time they are five years of age, their brain size will be ninty percent of their parents' brain size. Any sensory stimulation at this early brain maturation period is considered to be very important. Lack of positive stimulation at this point of time will be considered as a great loss. Right after birth, an infant's brain begins making over a trillion neuron connections, or synapses which are used to transmit information based on various life experiences. An infant's brain is said to produce about two to three million synapses per second. Stimulation through the senses of touch, hearing, vision, smell, and taste etc directly affect the sensory neurons and help in establishing these connections. When the neuron connections are more frequently used, the more information is retained and the subsequent learning becomes stronger and stable. It is because of this, we strongly recommend that intensive and continuous sensory stimulation is necessary right from young age. If some of the neural pathways are not regularly used, they will end up dying out, which is otherwise called as neural atrophy or pruning. Though this action prevents overloading, this becomes a necessary step in the neural processing. When these synaptic connections gain strength and stability with continuous sensory stimulation, the vigilant brain notices them especially as that of those exclusive pathways of important information. Then these synapses are protected by a natural neural

insulating material called the myelin sheath. This insulating coat helps in sending messages to the brain even faster. This process occurs mostly with the neurons and synapses that control a baby's sensory area such as for the eyes, ears, nose, mouth, and skin. Many of these new connections help infants to reach important milestones such as achieving color vision, developing pincer grasp, or striving for parental attachment etc. Billions of brain cells or neurons are formed throughout the first stages of fetal development and all through up to the birth. When an infant is born, the only part of the brain that is well developed is that of the brain-stem. This part of the brain controls the functions such as kicking, sleeping, rooting, crying and feeding. Finally all these information can be utilized positively for the productive and advanced human development.

Early stimulation as a crucial factor: For determining the infants brain function and development, both genetics and the child's environmemt plays a crucial role. A baby's environment gives both the physical and emotional experiences. Both of sensory stimulation and the neural pathway connections are major factors that lead to a healthy brain function in babies. Research shows that the physical and emotional experiences obtained in the first five years of their life directly influence their learning ability. These experiences will decide the brain growth that will take place in the rest of their life. In short, the strength of early stimulation will determine the child's future developmental trend. Sensory neuronal and synaptic functions are directly responsible for dramatic and rapid brain growth. In the book, "How Smart Is Your Baby? Develop and Nurture Your Newborn's Full Potential", Janet Doman (web 11.12.2015) said that a newborn baby is said to be functionally blind, deaf and insensate. She believes that it is up to the parents to use sensory stimulation to develop the sensory pathways that lead to proper brain development and function. The proper use of positive sensory

stimulation through all five senses in periodical intervals will help these sensory pathways to become stronger and in turn will achieve a permanent learning process. As neural pathways develop, it will be evident and easier for parents to understand the needs of their babies. By providing them with varying types of physical, emotional, and cognitive experiences, the children will gain more knowledge to use those skills effectively in future. Hence the children of any age will require more room and space for mobility, a chance for hands-on exploration, and a need for a strong communication. Periodical stimulation for a longer period of time is necessary for a good progress. By exposing the infants to such of these sensory motor- experiences, they will begin to become more comfortable with the world around them. Inter-personal and intra-personal sensory stimulation will help to develop a bondage and connection with their families and surroundings. A smart development of infant's brain becomes very essential for achieving human excellence. The benefits of sensory stimulation include such things as increased socialization, increased concentration, improved self-concept and increased alertness. A proper sensory stimulation activity at an earlier age and continuous life long learning process can make any child to reach greater heights.

The release of gastro intestinal hormones in mother and infant subsequent to sensory stimulation is explained by Uvnäs-Moberg K, Widström AM, Marchini G, Winberg J (1987:851-60 Web dt 13-09-2015). It is well established that sensory stimulation is of great importance for the growth of and for the physiological and psychological development of infants. Supplementary sensory stimulation such as non-nutritive sucking and tactile stimulation has been shown to increase the growth rate and the maturation of premature infants. In human neonates, non-nutritive sucking has a vagally mediated influence on the levels of some gastrointestinal

hormones. In animal experiments afferent electrical stimulations of the sciatic nerves at low intensity, leads to an activation of the vagal nerves and to a consequent release of vagally controlled gastrointestinal hormones such as gastrin and cholecystokinin. We therefore assume that both non-nutritive sucking and tactile stimulation trigger the activity of sensory nerves which leads to a release of vagally regulated gut hormones. Since gut hormones stimulate gastrointestinal motor and secretory activity and the growth of the gastrointestinal tract, and enhance the glucose-induced insulin release, they may contribute to the beneficial effects on maturation and growth caused by sensory stimulation. In the breast-feeding situation, the sucking of the child elicits similar reflexes in the mother leading to an activation of the maternal gut endocrine system and a consequent increase in energy uptake. These data indicate that many types of neurogenic reflexes induced in mother-infant interactions are of importance for the energy economy of both mother and child.

In addition to having the proper sensory stimulation, it is also necessary to have it at an earlier age. Active, intensive, and continuous sensory motor intervention of children at early age will bring miraculous developmental changes. The early stimulation becomes necessary to avail the well needed critical period of learning and to have a longer duration for the intensive training. It will also be useful in avoiding the unnatural mode and alternate pattern of learning like sign language etc. Negative effects like developmental delay are possible due to lack of stimulation. Neglect, stress, trauma, and abuse are all negative stimuli that can have a tragic effect on brain growth. Studies show that those infants or children who receive little to no attention and those who are not exposed to positive, purposeful stimuli by their parents; end up with brains that are twenty to thirty percent smaller in size than those who have had those "good" sensory experiences.

Multi-sensory stimulation for integerated growth: Sensory stimulation in learning means having activities that challenge or make use of all the five senses. These senses of touch, taste, smell, listening, and visual, must be included in one's learning. Schools incorporate sensory stimulation in their curriculum from the basics of math and reading to special classes such as art or extracurricular activities such as sports. Sensory stimulation also affects the emotional and social growth of a child. Sensory affectional deprivation syndrome illustrates the importance of maternal affection. When mothers cuddle, sway, sing, or rock their babies or children, they are helping that child to feel the emotional needs required for healthy growth.

Studies of avian and mammalian species have highlighted the importance of normal patterns of peri-natal sensory experience to early perceptual and behavioral capabilities. This included the recognition and preference for maternal olfactory, auditory, and visual information. It also included the capability for pre-natal and post-natal auditory learning, and sensitivity to temporal and spatial features of sensory stimulation. This animal-based research suggests the possible effects that alterations of perinatal sensory stimulation may have on early perceptual and behavioral development. The early development also depends on a number of related factors, including (a) the timing of the stimulation, (b) the amount of stimulation provided, and (c) the type of sensory stimulation presented.

Sensory Stimulation in Gayathri Mantram: The Importance of Sensory Stimulation is also explained in Gayathri Mantram. In Sanskrit it reads:

"Oṃ bhūr bhuvaḥ svaḥ,tát savitúr váreṇ(i)yaṃ
bhárgo devásya dhīmahi,dhíyo yó naḥ pracodáyāt"

In Tamil it means to say, “அறிவைத் தூண்டுகிற சுடர்க்கடவுளைத் தியானிப்போமாக”. A literal English translation can be given as:

"May we attain that excellent glory of Savitar the god:
So may he stimulate our prayers?"

Sensory loss and remediation: Sensory loss or deprivation can be noticed in one organ or in combination. It may be partial or total and may happen at birth or thereafter. It can be temporary or permanent. To overcome sensory defects, appropriate intervention strategies are required. Medical or surgical management, use of amplification devices like hearing aids or cochlear implants or other assistive devices, appliances and materials like viewing mirrors or brail machines, techniques like lip reading etc can be used to augment the sensory loss and subsequent needs. Hence the uses of devices, techniques, or methods to assist the loss are strongly advised. Since sensory stimulation includes a variety of activities without any limitation, therapists and special educators guide children to develop it.

Vision with kindness: Kurals 575 and 576 from Reference 91 to 92.

Reference No: 091. Kural 575 in Chapter 58 titled, “Benign Look-கண்ணோட்டம்” speaks about eyes filled with kindness.

“கண்ணிற்கு அணிகலம் கண்ணோட்டம்; அஃதின்றேல்
புண்ணென்று உணரப் படும்”. (Kural 575)

ஒருவனுடைய கண்ணுக்கு அணிகலமாவது கண்ணோட்டம் என்னும் பண்பே; அஃது இல்லையானால் புண் என்று உணரப்படும்.

“Benign look is the jewel of the eyes
Without it they are but sores”.

He says that only when eyes blessed well with both of good visual acuity and kindness; it is to be considered as an eye. Kind and passionate looks alone are considered as the true ornaments of the eyes. Otherwise they are considered as two sore wounds in the face. So, he attaches humaneness with the organs of our body and its functions. Peter J.Valletutti et al (1985:9) tell that in the classroom, the teacher should express with sincere affection for the student for eliciting positive responses. Guy R. Lefrancois (1986:539) also tells about the concern for humans and humanism. Since autistic children lack the most needed eye contact, their social and communication development in particular and the subsequent overall general progress are significantly affected. Even if they are able to see, they don't perceive and attend to stimuli. The book by Deena K. Bernstein (1989:34, 54, 303) quotes Ellenmorris Tiegerman as saying that in adult–infant conversation, there is nearly constant eye communication and intermittent, alternating vocal communication. He says that the earliest sensory system to come under the infant's control is the visual system. Probably Valluvar knew this fact and came up with his explanation for eyesight.

Reference No: 092. Kural 576 in Chapter 58 titled, "Benign Look-கண்ணோட்டம்" also says about the quality of eyesight which is required for human beings.

"மண்ணோடு இயைந்த மரத்தனையர் கண்ணோடு
இயைந்துகண் ணோடா தவர்". (Kural 576)

கண்ணோட்டத்திற்கு உரிய கண்ணோடு பொருந்தி இருந்தும் கண்ணோட்டம் இல்லாதவர் (கண் இருந்தும் காணாத) மரத்தினைப் போன்றவர்.

"Men with no graceful eyes
Exist on earth like trees".

It is said that persons with good eyesight but without kindness, will resemble the trees. Such people will be considered at lower levels in evolutionary development.

Multi-sensory stimulation.

Reference No: 093. Kural 27 in Chapter 3 titled, "Greatness of Ascetics-நீத்தார் பெருமை" says about the importance of sensory stimulation in skill development.

> "சுவைஒளி ஊறுஓசை நாற்றம்என்று ஐந்தின்
> வகைதெரிவான் கட்டே உலகு". (Kural 27)

சுவை ஒளி ஊறு ஓசை நாற்றம் என்று சொல்லப் படும் ஐந்தன் வகைகளையும் ஆராய்ந்து அறிய வல்லவனுடைய அறிவில் உள்ளது உலகம்.

> "The world belongs to those who quell
> Taste, sight, touch, sound and smell".

This explains about the importance of sensory stimulation in intellectual and general development of an individual. This explains that the world is within the knowledge of him; who knows the properties of taste, light, touch, hearing and smell. He explains that the world will support those persons who will critically analyze all these sensory inputs. Recent studies also tell that un-stimulated cells may go in for atrophic condition. Neglect, stress, trauma, and abuse are negative stimuli that can have tragic effect on brain growth. Gummati Sharmila Mandanna (2002:13) as reported by Jayaram M., and Savithri S.R. says, "Associated sensory problems in the cerebral palsied contribute to language delay in them".

Sensory input regulation: Kural 1302, 24, 25, 126, 6, 343 and 354 from Reference 94 to 100.

Reference No: 094. Kural 1302 in chapter 131 titled, “Sulking-புலவி” say about limited dislike one can safely express and little more of this can be dangerous.

“உப்புஅமைந் தற்றால் புலவி; அதுசிறிது
மிக்கற்றால் நீள விடல்.” (Kural 1302)

உப்பு, உணவில் அளவோடு அமைந்திருப்பதைப் போன்றது ஊடல்; ஊடலை அளவுகடந்து நீட்டித்தல், அந்த உப்பு சிறிதளவு மிகுதியாக இருப்பதைப் போன்றது.

“Feigning sulk in limit is like adding salt to food
Too much of it is like excess of salt in food.”

This explains about regulating the sensory inputs at optimal level. An optimum amount or limited feigned dislike in the relationship of lovers is accepted. This may be advised for a balanced emotional status and to sustain the relationship. It is like the salt in proportion in a good food. But more of feigning and prolonging it for a longer time is like the excess of salt in the food which will become unpalatable. Similarly the excessive feigned dislike will spoil the maintainance of good relationship. Here the sense of taste is given as an example for optimum stimulation and the extreme sensory stimulation can bring negative results.

Reference No: 095. Kural 24 in Chapter 3 titled, “Greatness of Ascetics-நீத்தார் பெருமை” says about regulating such sensory inputs.

“உரன்என்னும் தோட்டியான் ஓரைந்தும் காப்பான்
வரன்எனும் வைப்பிற்குஓர் வித்து.” (Kural 24)

அறிவு என்னும் கருவியினால் ஐம்பொறிகளாகிய யானைகளை அடக்கிக் காக்க வல்லவன், மேலான வீட்டிற்கு விதை போன்றவன்.

“Who by wisdom controls five senses
Is a seed of heavenly joys”.

Only the positive sensory inputs will help in achieving a healthy life with a good name and fame. In order to process only the selected positive sensory inputs, we need the much required wisdom. He who guides his five senses by the hook of wisdom will be a seed in the joyous world of heaven. Even those minds that know the correct path can also be dragged away from it by unruly senses and faulty stimulation.

Reference No: 096. Verse 25 in Chapter 3 titled, "Greatness of Ascetics- நீத்தார் பெருமை" explains about controlling and regulating the sensory inputs.

"ஐந்துஅவித்தான் ஆற்றல் அகல்விசும்பு ளார்கோமான்
இந்திரனே சாலும் கரி." (Kural 25)

ஐந்து புலன்களாலாகும் ஆசைகளை ஒழித்தவனுடைய வல்லமைக்கு, வானுலகத்தாரின் தலைவனாகிய இந்திரனே போதுமான சான்று ஆவான்.

"To a man who has curbed his five senses
Indra is a witness to his powers."

He explains that people who cannot control their sensory inputs will ultimately end up in failure. Such downfall is imminent for all people including the heavenly bodies. The great example of Lord Indira as explained in Hindu mythology is a sufficient proof for such lapses. So, we have to be careful in processing only the selected positive sensory inputs. Swami Srikantananda (2005:22) says, "Lord Indra, enchanted by the beauty of the wife of great sage Gautama, lost his power of discrimination and became a victim of lust. Overpowered by lust, Indra forgot his position and status in the society; and unmindful of the consequences, commited crimes". It also indicates that we should not violate the norms.

Reference No: 097. Kural 126 in Chapter 13 titled, 'Self Control-அடக்கம் உடைமை' says to regulate activities.

"ஒருமையுள் ஆமைபோல் ஐந்துஅடக்கல் ஆற்றின்
எழுமையும் ஏமாப்பு உடைத்து". (Kural 126)

ஒரு பிறப்பில், ஆமைபோல் ஐம்பொறிகளையும் அடக்கியாள வல்லவனானால், அ∴து அவனுக்குப் பல பிறப்பிலும் காப்பாகும் சிறப்பு உடையது.

"Restrain five senses in one birth like a tortoise
You'll be guarded in all seven births".

When the tortoise senses the danger, it withdraws its four limbs and the head into its shell. Like that, those who live with self control and restrain from the tempting pleasure coming from the senses; will find a safe shelter with good protection and happiness in all their births. Rebirths as reported in this poem are the accepted belief in Indian culture and tradition. Such a disciplined self control of sensori inputs will ensure purity by not doing evil things and will boost up one's self-esteem. Anybody can be proud of possessing such a good admirable behavior. In song eight in chapter twelve, Tamil saint Thayumanavar (1980:99) also says about controlling the senses. Valluvar thus advises optimum sensory input. People who have not addicted to sensual pleasure and who follow the faultless disciplined behavior will be following the Godly path. Such people will live long and will achieve permanent happiness.

Reference No: 098. Kural 6 in Chapter 1 titled, "Glory of God-கடவுள் வாழ்த்து" says about controlling sensory inputs and to follow the disciplined behavior.

"பொறிவாயில் ஐந்தவித்தான் பொய்தீர் ஒழுக்க
நெறிநின்றார் நீடுவாழ் வார்." (Kural 6)

ஐம்பொறி வாயிலாகப் பிறக்கும் வேட்கைகளை அவித்த இறைவனுடைய பொய்யற்ற ஒழுக்க நெறியில் நின்றவர், நிலை பெற்ற நல்வாழ்க்கை வாழ்வர்.

"They live long who follow virtuous ways
Of God, who has curbed five senses".

God is said to have destroyed all the desires of this world which come through five sensory avenues. Valluvar says that those who abide in God in such a faultless manner will prosper. People who avoid getting the bad sensory inputs will lead a God's way of righteous life and will be blessed with long and permanent happiness.

Reference No: 099. Kural 343 in Chapter 35 titled, "Renunciation-*துறவு*" also says about regulation and controlling of sensory inputs.

"அடல்வேண்டும் ஐந்தன் புலத்தை; விடல் வேண்டும்
வேண்டிய எல்லாம் ஒருங்கு." (Kural 343)

ஐம்பொறிகளுக்கு உரிய ஐந்து புலன்களின் ஆசையையும் வெல்லுதல் வேண்டும். அவற்றிற்கு வேண்டிய பொருள்களை எல்லாம் ஒருசேர விடல்வேண்டும்.

"To conquer desires of five senses
Renounce all temptations".

Let the greed of five senses be destroyed and everything of such stimulation is abandoned. This type of life pattern is what the ascetic has desired and only when we completely lose interest in material wealth, we can be considered as winners.

Reference No: 100. Kural 354 in Chapter 36 titled, "Realizing the Truth-*மெய் உணர்தல்*" explains the importance of cognition and insight about past experiences.

"ஐயுணர்வு எய்தியக் கண்ணும் பயம்இன்றே
மெய்உணர்வு இல்லா தவர்க்கு". (Kural 354)

மெய்யுணர்வு இல்லாதவர்க்கு ஐந்து புலன்களின் வேறுபாட்டால் வளர்ந்த ஐந்துவகை உணர்வும் முற்றுப்பெற்ற போதிலும் பயன் இல்லை.

> "Controlling five senses is of no worth
> Without realization of the truth".

He talks about wisdom which alone can correctly help in processing the selected sensory inputs. This wisdom will put us into the acceptable correct track and for developing good knowledge. Wisdom can be achieved with good cognitive development and also with the knowledge of insight about our past experiences. Only when we have good thinking with a sound mind, we can associate all our sensory inputs with the available basic knowledge. Asha Yathiraj and Kavitha E.Mascarenhas (2004:5) quotes, "correct auditory processes with many higher level functions like good attention, localization, discrimination, closure, association, memory etc are involved in the appropriate perception of an acoustic event. Most of these processes are interdependent and involve both the peripheral and central nervous systems". Valluvar says that even those persons who have very good sensory inputs will not benefit from them, if they are not able to utilize them with good background knowledge and critical thinking. Helen Keller in the restored edition of her book "The story of my life", by James Brger (2003: xxiv) made the personal observation as, "The bulk of the world's knowledge is an imaginary construction. Even direct sensory experience is a complicated assembly of sensations and language". The book by Deena K.Bernstein (1989:62) quoted Sugarman as saying that several researchers suggest the existence of prerequisite cognitive and social schemes that gradually combines into complex communicative sequences during the stages of sensory-motor development.

Selective Listening: Kural 416, 418 and 1199 from Reference 101 to 103.

Reference No: 101. Kural 416 in chapter 42 titled, "Listening-கேள்வி" tells about selective listening.

"எனைத்தானும் நல்லவை கேட்க அனைத்தானும்
ஆன்ற பெருமை தரும்." (Kural 416)

எவ்வளவு சிறிதே ஆயினும் நல்லவற்றைக் கேட்டறிய வேண்டும்; கேட்ட அந்த அளவிற்கு அவை நிறைந்த பெருமையைத் தரும்.

"Listen to wise words, however little
That much it elevates you still".

The Kural highlights the fact that among all that we hear, we have to carefully focus our listening only to the selected good items. If one gives importance and listens carefully with full interest even to such small good instructions and ideas, he can reach greater heights in life. Such listening can bring glory, pride, and great dignity without fail. The more we listen to good things and better words of wisdom; the more we become humble, honored, dignified and noble. The poet realizes the feeling of despair, and the method of overcoming it by mere listening to other's good instructions. Such a careful listening can help us to sharpen our ideas. Detachment from sensual objects can be developed by determination, and healthy life can be achieved by processing only the positive sensory inputs. Marilyn Segal (1988: 139 - 140) says, "Right from the start, babies have the ability to tune in to new information and to ignore redundant messages. This discriminative ability serves as the basis for more complex learning". This processing alone helps a person to achieve a good name and fame. Aasan G.V.K (2008:49) writes, "If the knowledge gathered is good, the activities will be good. When an individual listens to influential noble words; his behavior, conduct, character, and deeds tend to be good. Since such words are useful to him and also help others, he earns the love and regards of all people".

Reference No: 102. Kural 418 in chapter 42 titled, "Listening–கேள்வி" also says about selective listening / effective hearing.

"கேட்பினும் கேளாத் தகையவே கேள்வியால்
தோட்கப் படாத செவி." (Kural 418)

கேள்வியறிவால் துளைக்கப்படாத செவிகள், (இயற்கையான துளைகள்கொண்டு ஓசையைக்) கேட்டறிந்தாலும், கேளாத செவிட்டுத் தன்மை உடையனவே.

"The ears not attuned to good listening
Tho' open, are impaired of hearing".

It is explained that those ears which are not well stimulated by the thought provoking moral instructional facts are practically considered as under-stimulated or deaf ears. In addition to having normal hearing, the strength of hearing the moral instructions and good values; makes a difference in learning the life-skills. Such a good learning with good moral instructions alone accounts for effective hearing. Many of the present day conflicts starting from home and upto international level can be attributed to lack of this moral teaching and learning.

Reference No: 103. Kural 1199 in chapter 120 titled, "Pining Alone-*தனிப்படர் மிகுதி*" say the importance of hearing the speech of loved ones even in adverse and failed relations.

"நசைஇயார் நல்கார் எனினும் அவர்மாட்டு
இசையும் இனிய செவிக்கு". (Kural 1199)

யான் விரும்பிய காதலர் மீண்டு வந்து அன்பு செய்யமாட்டார் என்றாலும், அவரைப் பற்றிய புகழைக் கேட்பதும் என செவிக்கு இன்பமாக இருக்கின்றது.

"Though my lover gives not my heart's desire
A word from him is sweeter to my ear".

Even if a lady knows that her beloved lover had deceived her, listening a word of praise about him will bring joy and satisfaction. So, selective listening of positive stimulus brings joy and happiness.

Wrong perception:

Reference No: 104. In Kural 417 coming in Chapter42 titled "Listening–கேள்வி", he explains the balanced approach of scholars even after wrong perception of inputs.

"பிழைத்துஉணர்ந்தும் பேதமை சொல்லார் இழைத்துணர்ந்து
ஈண்டிய கேள்வி யவர்." (Kural 417)

நுட்பமாக உணர்ந்து நிறைந்த கேள்வியறிவை உடையவர் (ஒருகால் பொருள்களைத்) தவறாக உணர்ந்திருந்தாலும், பேதைமையானவற்றைச் சொல்லார்.

"Even if the wise understand incorrectly
They never speak foolishly".

Scholars, who studied well and diligently listened to instructions; will not speak foolishly, even if they have imperfectly understood a matter by wrong perception. A good listener will talk safely without making any foolish statements.

Conducive environment in Perception:

Reference No: 105. Kural 1228 in chapter 123 titled, "Evening Woes- பொழுது கண்டு இரங்கல்" explains the need of favourable environment to perceive correctly.

"அழல்போலும் மாலைக்குத் தூதுஆகி ஆயன்
குழல்போலும் கொல்லும் படை". (Kural 1228)

ஆயனுடைய புல்லாங்குழல், நெருப்புப்போல் வருத்தும் மாலைப்பொழுதிற்குத் தூதாகி என்னைக் கொல்லும் படையாகவும் வருகின்றது.

"Shepherd's flute once sweet now burns me
Heralding eve as a deadly army".

As the environment changes, even for the same stimuli our perception may get altered. When the environment is favorable, we can enjoy even the shepherd's flute music and consider them as sweet and pleasant. But with unfavorable mind and situations, even such flute music can sound as a fiery forerunner. Under those adverse conditions, such stimulations can even become a weapon that is used to slay a person. Particularly during the period of love making and in the absence of a loving partner, even the flute music can bring aversion to the ear. So, to perceive and enjoy even the pleasant sensory stimulus; there should be a conducive pleasant environment. Unfavourable environmental situations can bring annoying results. A positive mindset and a thorough preparedness can decide the success of stimulus-response action.

Sensory deprivation: Kural 1261 and 9 from Reference 106 to 107.

Reference No: 106. Kural 1261 in chapter 127 titled, "Longing for the Lover-அவர் வயின் விதும்பல்" tell about the reduction or loss of a function due to the failure to meet and enjoy the long pending happenings.

"வாள்அற்றுப் புற்கென்ற கண்ணும்; அவர்சென்ற
நாள்ஒற்றித் தேய்ந்த விரல்." (Kural 1261)

என் கண்களும் அவர் வரும்வழியைப் பார்த்துப் பார்த்து ஒளி இழந்து அழகு கெட்டன. விரல்களும் அவர் சென்ற நாட்களைக் குறித்துத் தொட்டுத் தொட்டுத் தேய்ந்தன.

"My bright eyes dimmed and lost shining
Fingers thinned listing days of parting".

This Kural relates to the status of a lady who has been unsatisfactorily waiting for a long time to meet her lover and explains about the consequences of sensory deprivation. Because of a long wait, her sight is said to be dim and her eyes have lost

the luster and brightness. Her fingers are also said to have worn out by making the regular markings on the wall for all those days of his absence. Recent scientific studies also tell that sensory process may diminish, if it is not constantly or periodically stimulated until its stabilization. It relates to the shallow level processing of the brain. The prolonged absence of target stimulus can have negative impact and result in subsequent fatigue or failure to stabilize an activity. So, stimulus presentation at least in periodical intervals is necessary to continue the processing and to get the desired response. The absence of conducive environment can alter the process of sensory perception. Ronald L. Schow et al (1980:237) say, "If the aural rehabilitation does not make provisions for amplification and effective language stimulation during the critical period (three to four years), the child's language development will be severely delayed or will not develop naturally. On the other hand, he quotes the studies of Downs and others which have shown positive effects with early amplification on the language acquisition of hearing impaired children".

Loss of Sensation:

Reference No: 107. Kural 9 in chapter 1 titled, "Glory of God-கடவுள் வாழ்த்து" tells about sensory losses.

"கோளில் பொறியில் குணமிலவே எண்குணத்தான்
தாளை வணங்காத் தலை." (Kural 9)

கேட்காத செவி பார்க்காத கண் முதலியனபோல் எண்குணங்களை உடைய கடவுளின் திருவடிகளை வணங்காதவரின் தலைகள் பயனற்றவைகளாம்.

"Who bows not at the feet of eight –virtued God
Has his head in vain like senses palsied".

It says that one who does not worship the attributes of God is as useless as a sense organ which does not have the power of sensation. Mittal S.R et al (2005:7) quotes, “senses are the gateway to the knowledge and blindness limits perception, cognition, and also language development. He says that the research has confirmed that the blind children generally lag behind their seeing counterparts by two years”. Arun Banik et al (2005:34) say, “The effect of deafness leads to auditory deprivation and poor communication”. Although hearing impairment results in multiple problems, the outstanding one is the communication breakdown.

Perceptual isolation is the deliberate reduction or removal or lack of stimuli from one or more of the senses. Sensory deprivation in breathing mechanism can result in obstructive sleep apnea. In vision, blindfolding materials or hoods can deprive the stimulation. Hearing sense can be deprived due to earmuffs or earplugs. Similarly cutting off the sense of smell, touch, taste, thermal perception or heat and gravity are also possible. In some conditions like meditation and relaxation, short-term deprivation is described to be useful. But however an extended or forced sensory deprivation which can happen in extreme anxiety, hallucinations, bizarre thoughts, and even depression can result in pathological conditions. The book of Jack Katz (1985:671) quotes Bennet et al and Rosenweig et al as saying, “sensory restrictions or sensory deprivations can have a profound influence on behavioral, chemical, and structural development of an individual”. Aging causes a general decrease in a variety of functional loops sub-serving somato-sensory, special sensory, perceptual and cognitive operations. A considerable amount of conduction changes are noticed in nerve fibers due to sensory deprivation. On 22nd January 2008, the BBC - two aired a Horizon special program entitled, "Total Isolation "(Website retrieved on14-09-2015). After isolation the participants noted that they had inability to sense time, and

experienced hallucinations, which made the experience difficult. From this it is clear that senses are important in brain's ability to regulate internal status.

Simultanious Stimulation:

Reference No: 108. Kural 1101 in chapter 111 titled, "Joy of Sex- புணர்ச்சி மகிழ்தல்" say that ladies are the potential source of giving multifaceted simultaneous pleasure to men through all sensory avenues.

> "கண்டுகேட்டு உண்டுஉயிர்த்து உற்றுஅறியும் ஐம்புலனும்
> ஒண்தொடி கண்ணே உள". (Kural 1101)

கண்டும் கேட்டும் உண்டும் முகர்ந்தும் உற்றும் அறிகின்ற ஐந்து புலன்களாலாகிய இன்பங்களும் ஒளி பொருந்திய வளையல் அணிந்த இவளிடத்தில் உள்ளன.

> "All joys of sight, hearing, taste, smell, and touch
> Has this bangled maiden very much".

Only ladies are capable of providing simultaneous, satisfactory and pleasurable multisensory stimulation through all the avenues. They give joy and happiness to men through all the sensory channels by seeing her beauty, listening to her voice, hugging and smelling her body and by kissing her.

Signal detection by intuition: Kural 703, 706 and 1275 from Reference Nos: 109 to 111.

Reference No: 109. Kural 703 in Chapter 71 titled, "Mind Reading- குறிப்பு அறிதல்" says the importance of employing people who have good intuitive capacity.

> "குறிப்பின் குறிப்புணர் வாரை உறுப்பினுள்
> யாது கொடுத்தும் கொளல்". (Kural 703)

(முகம் கண் இவற்றின்) குறிப்புக்களால் உள்ளக்குறிப்பை உணர வல்லவரை நாட்டின் உறுப்புக்களுள் எதைக் கொடுத்தாவது துணையாகப் பெற்றுக்கொள்ளவேண்டும்.

"Secure the man who reads other's minds
By giving him whatever the price is".

It explains well about the intuitive power to know and understand even the subtle stimulus. The king should spot and identify the correct persons who can read and understand even the subtle clues from other people. Having such persons will be an asset to any ministry or administration and the king should give any prize to secure the services of them for better development of the nation. Avvaiyaar in 'Kondrai Vaenthan' says "ஏவா மக்கள் மூவா மருந்து" which means that children who act with good intuitive capacity will be like good medicated nector.

Reference No: 110. The Kural 706 in Chapter 71 titled, "Mind-Reading-குறிப்பு அறிதல்" also talks about intuitive capacity.

"அடுத்தது காட்டும் பளிங்குபோல் நெஞ்சம்
கடுத்தது காட்டும் முகம்". (Kural 706)

தன்னை அடுத்த பொருளைத் தன்னிடம் காட்டும பளிங்கு போல், ஒருவனுடைய நெஞ்சத்தில் மிகுந்துள்ளதை அவனுடைய முகம் காட்டும்.

"Face is the clear index of the mind
As crystal reflects things around".

As the mirror reflects the image, one's face can clearly indicate the uppermost feelings and thoughts flowing in one's mind. Since face reflect the inner mind, a keen observation of it can give good clues to understand the personality of a person.

Reference No: 111. Kural 1275 in Chapter 128 titled, "Revealing the Mind-*குறிப்பு அறிவுறுத்தல்*" tells about the signal detection through non-verbal communication.

"செறிதொடி செய்திறந்த கள்ளம் உறுதுயர்
தீர்க்கும் மருந்துஒன்று உடைத்து." (Kural 1275)

காதலி என்னை நோக்கிச் செய்துவிட்டுச் சென்ற கள்ளமான குறிப்பு, என் மிக்க துயரத்தைத் தீர்க்கும் மருந்து ஒன்று உடையதாக இருக்கின்றது.

"The closely–bangled wife's secret sign
Has cure for love pain."

The cunning departure of the lover who secretly left with tightly fitted bangles has an idea to express. The signals expressed by the lover can act as medicine to alleviate his deep sorrows. The mutual understanding of signals can be better than even verbal expression.This also explains about non verbal communication and its effectiveness in certain situations.

Tolerating criticism: Kural 389, 151, 159 and 160 from Reference No: 112 to 115.

Reference No: 112. Kural 389 in Chapter 39 titled, "Regal Dignity-இறை *மாட்சி*" says that the whole world will dwell under the umbrella of the king who can bear the words that embitter the ear.

"செவிகைப்பச் சொற்பொறுக்கும் பண்புடை வேந்தன்
கவிகைக்கீழ் தங்கும் உலகு". (Kural 389)

குறைகூறுவோரின் சொற்களைச் செவி கைக்கும் நிலையிலும் பொறுக்கின்ற பண்பு உடைய அரசனது குடை நிழலில் உலகம் தங்கும்.

"The world lives under the sway of a ruler
Who endures words bitter to the ear".

Inspite of a King's intellectual thinking and good administration; a minister's or even the citizens' comments can be harsh, strong, unpleasant, disturbing, critical and even difficult to hear. It may even go to the extent of hurting the feelings and sentiments of kings. But still, the king is expected to show a good restrain and tolerance in his response. He has to take all good advice in its reality, including about those lapses in his governing skills. He has to find ways and means to rectify all his mistakes. Under the umbrella care and governance of such magnanimous kings, citizens will definitely feel secured and live happily for a long time.

Reference No: 113. Kural 151 in Chapter 16 titled, "Tolerance-பொறை உடைமை" also expresses the same idea of tolerance to harsh comments.

"அகழ்வாரைத் தாங்கும் நிலம்போலத் தம்மை
இகழ்வார்ப் பொறுத்தல் தலை." (Kural 151)

தன்னை வெட்டுவொரையும் விழாமல் தாங்குகின்ற நிலம்போல், தம்மை இகழ்வாரையும் பொறுப்பதே தலையான பண்பாகும்.

"Chief of virtues is to bear with revilers
Just as the earth bears its diggers".

It explains about the good virtue of bearing and tolerating those who revile us. It is just like the earth which patiently bears up all the insults and pain of digging. We have to bear all those people who insult us and do wrong things to us. Forgiving becomes a good attitude and a desirable virtue.

Reference No: 114. Kural 159 in Chapter 16 titled, "Tolerance- பொறை உடைமை" also says about tolerance of harsh comments.

"துறந்தாரின் தூய்மை உடையர் இறந்தார்வாய்
இன்னாச்சொல் நோற்கிற் பவர்." (Kural 159)

வரம்பு கடந்து நடப்பவரின் வாயில் பிறக்கும் கொடுஞ் சொற்களைப் பொறுத்துக் கொள்பவர், துறந்தவரைப்போலத் தூய்மையானவர் ஆவார்.

"Who forebear evil words of the unrighteous
Are far purer than ascetics".

The insolent behave arrogantly and rudely and because of that, even good people have to face the insults with un-courteous words. Those people who tolerate and show the good forbearance even in the face of such insults are considered as purer than ascetics. Though they are householders, they are considered to have practiced the higher order of discipline like saints.

Reference No: 115. Kural 160 in chapter 16 titled, "Tolerance- பொறை உடைமை" also expresse the same.

"உண்ணாது நோற்பார் பெரியர் பிறர்சொல்லும்
இன்னாச்சொல் நோற்பாரின் பின்." (Kural 160)

உணவு உண்ணாமல் நோன்பு கிடப்பவர், பிறர் சொல்லும் கொடுஞ் சொற்களைப் பொறுப்பவர்க்கு அடுத்த நிலையில்தான் பெரியவர்ஆவர்.

"Better are they who endure bitter insults
Than those who fast and do penance".

Generally those who endure abstinence from food and do penance are considered as great souls. But people who have patience and tolerate the un-courteous attacking speech of other ignorant people are considered even one step better than those great souls. This tolerance will be a greater penance and tribute than such a routine fasting.

Wealth of Listening: Kural 411, 412 and 414 from Reference 116 to 118.

Reference No: 116. Kural 411 in Chapter 42 titled, "Listening-கேள்வி" says that the rich knowledge gained by the ear is the chief of all wealth.

> "செல்வத்துள் செல்வம் செவிச்செல்வம் அச்செல்வம்
> செல்வத்துள் எல்லாம் தலை." (Kural 411)

செவியால் கேட்டறியும் செல்வம், செல்வங்களுள் ஒன்றாகப் போற்றப்படும் செல்வமாகும். அச் செல்வம் செல்வங்கள் எல்லாவற்றிலும் தலையாயனதாகும்.

> "Listening is the wealth of wealth
> It is the crown of all wealth."

This poem tells that among all the wealth a man can accumulate or have, wealthy knowledge gained by the ear by its listening power is considered to be the best of all. Listening skills helps in different ways like:

- To have effective verbal communication and for getting auditory- feedback.
- To get ideas and knowledge for developing positive changes in our life.
- Getting counseling for eliminating or reducing our emotional problems.
- To identify the impending danger well in advance.

The book by Lennard J.Davis (1997:87) quotes Aristotle to say that he contended that of all the senses, hearing contributed most to the development of intelligence and knowledge. He characterised deaf individuals as "senseless and incapable of reason and no better than the animals of the forest and un-teachable". It is also cited that deafness baffled Hippocrates and he finally surmised that there was something supernatural about deafness. The etiology and character of deafness eluded early physicians and philosophers; the condition was usually attributed to supernatural causes. Jack Katz (1985:622) in his book quoted Kathryn A. Barrett Jack as saying that permanent hearing loss or inconsistent auditory functions are associated with

educational handicaps. The amount of communication problem due to deafness will directly depend upon the amount, type, and the onset of hearing loss.

Reference No: 117. Kural 412 in Chapter 42 titled, “Listening-கேள்வி” also tells about the importance of hearing / listening.

“செவிக்குணவு இல்லாத போழ்து சிறிது
வயிற்றுக்கும் ஈயப்படும்”. (Kural 412)

செவிக்குக் கேள்வியாகிய உணவு இல்லாதபோது (அதற்குத் துணையாக உடலை ஓம்புமாறு) வயிற்றுக்கும் சிறிது உணவு தரப்படும்.

“Whenever food for the ear is deferred
Some food for the stomach is offered”.

It says that only when there is no verbal input as food for the ear, a little food should be given to the stomach also. Since hunger and thirst are considered to be the primary physiological needs of every living organism, food for stomach is considered to be one of the essential and basic needs. It becomes very important for the highly evolved human beings to maintain a good health with much needed nutrition and a balanced metabolism. This can be achived by taking good diet. But in Valluvar’s concept, the priority of eatables as food when compared with that of hearing is quite different. He gives preferential importance to the listening by hearing and gives only secondary importance to palatable foods.

Reference No: 118. Kural 414 in Chapter 42 with the title, “Listening-கேள்வி” talks about the importance of hearing / listening.

“கற்றிலன் ஆயினும் கேட்க அஃதொருவருவற்கு
ஒற்கத்தின் ஊற்றாம் துணை”. (Kural 414)

நூல்களைக் கற்கவில்லையாயினும், கற்றிந்தவரிடம் கேட்டறிய வேண்டும்; அ∴து ஒருவனுக்கு வாழ்க்கையில் தளர்ச்சி வந்தபோது ஊன்றுகோல் போல் துணையாகும்.

"Though unlettered, one should heed
It is a prop in hours of need".

This poem says that even in the absence of any academic learning; let a man carefully listen to the teaching of the learned persons. This will be just like a sturdy staff in adversity on a slippery floor. In general, only after attaining and achieving the basic developmental maturity of physical, mental and communicative language skills; a child starts getting educational inputs from the school. But, some children due to certain medical problems like sensory losses or delay in physical / mental maturity or due to emotional disturbance or unacceptable environmental or economic factors; they are not able to pursue their basic or advanced academic studies. Even in such illiterate conditions, hearing the valuable speech of the learned people becomes very important to improve the individual status or standards. Knowledge acquired by listening was a major division of learning even in our ancient system and transmission of vedas are good example for it. A good listening can help to develop skill excellence and it is the primary way of learning concepts.

Listening skill for speech development and meaningful life: Kural 419 and 420 from Reference 119 to 120.

Reference No: 119. Kural 419 which is also placed in Chapter 42 titled, "Listening-கேள்வி"says about the importance of hearing / listening for speech development.

"நுணங்கிய கேள்வியர் அல்லார் வணங்கிய
வாயினர் ஆதல் அரிது". (Kural 419)

நுட்பமான பொருள்களைக் கேட்டறிந்தவர் அல்லாத மற்றவர், வணக்கமான சொற்களைப் பேசும் வாயினை உடையவராக முடியாது.

"Those not heeding to men of keen speeches
Rarely speak humble words".

Listening to the exposition of complex and fine points can sharpen the listener's powers of thinking and that can help automatically to develop humility. For achieving skill excellence and a good cognitive development, a good listening task becomes a must. It is a rare thing to find gentleness and modesty of speech - a reverend mouth, with those who have not received refined choice instruction. Always the speech and language development particularly in developmental period will depend on the status of one's hearing capacity. The book of Jack Katz (1985:789) cited Philip M. Prinz who said that severe to profound hearing impairment may have a devastating effect on the development of language and communicative competence. Valluvar's inference of linking hearing with a good Speech output goes well with the modern scientific studies and knowledge. His intricate knowledge to link Speech and Hearing skills is a great scientific truth, which is very relevant even today. Those who have not listened to the refined and choice instruction of the wise will rarely use gentle and modest words. Hallowell Davis and Richard Silverman S. (1970:360) points out that Speech is normally controlled by the ear. In the book of Jack Katz (1985:622) Fry stated that the motivation for language acquisition is ordinarily generated through the auditory channel. The greatest success of speech and language development occurs between the ages of six months to six years, when sensory input is available and motor practice is continuous. Any degree of failure or delay in receptive or expressive language interferes with the educational process; not only in developmental years, but in all the academic years that follow. The greatest barrier to

education is the failure to learn the language. According to Fry, acquisition of Speech and Language must precede that of reading and writing without which the academic achievement would surely be adversely affected. Hence the auditory perception, problems exhibited in speech and language production, and the subsequent academic achievement are related to the degree and type of hearing loss and the age of its onset. The book by Jack Katz (1985:622,623) points out the findings of authors like Holman Kunze, Lewis, Brooks, Katz, Sak and Ruben, Brandes and Ehinger, Glass, Hoffman-Lawless et al, Masters and Marsh. They had noted that even the small amount or repeated bouts of fluctuating hearing loss or chronic otitis media otherwise called as conductive hearing loss can result in deficits of auditory perception, auditory decoding, auditory discrimination, auditory memory, vocabulary acquisition, speech and language structure, educational achievements etc.

Reference No: 120. Kural 420 in Chapter 42 titled, "Listening-கேள்வி" says the importance of hearing for a meaningful life.

> "செவியின் சுவையுணரா வாயுணர்வின் மாக்கள்
> அவியினும் வாழினும் என்? " (Kural 420)

செவியால் கேள்விச்சுவை உணராமல் வாயின் சுவையுணர்வு மட்டும் உடைய மக்கள்,இறந்தாலும் என்ன? உயிரோடு வாழ்ந்தாலும் என்ன?

> "Some have joys of the mouth but not the ear
> What matters if they live or expire?"

Are people with deafness less privileged? In this poem, he questions the existence of people who can judge the tastes by the mouth and not perceiving information by listening skill. Lack of listening may be due to hearing loss or who lack attention and both may be a part of broader disability condition. It implies that

persons with deafness will not hear the words, and in turn will fail to understand the meaning of conversation. Inspite of having other meritorious skills, these people were considered as worthless. By calling them “Maakkal (மாக்கள்)”, he possibly considerd them in the lower level of social status. It implies that nobody can benefit from them. In the same line of Thiruvalluvar’s thinking, many other foreign philosophies also had opinion. Lennard J. Davis (1997:188) says that for centuries, people with disabilities have been an oppressed and repressed group. People with disabilities have been isolated, incarcerated, observed, written about, operated on, instructed, implanted, illtreated, institutionalized, and controlled to a degree probably unequal to that experienced by any other minority group. It appears that the disability group, always an actively repressed memento mori for the fate of the normal body; gains a new, non-medicalized, and positive legitimacy. Disability has been seen as eccentric, therapeutically oriented, out-of–the–mainstream, and certainly not representative of the human condition. He says that there have been people with disabilities throughout history. But only in the last twenty years they have been themselves as a single, allied, united physical minority. The absence of categories is the only one reason that disability studies have been suppressed. Lennard J. Davis (1997:7) in his book quotes Alexander Graham Bell who warned upon the formation of a deaf variety of human race and said that, “tendency among deaf-mutes to select deaf- mutes as their partners in marriage”.

Deafness in ancient Greece: The book by Lennard J. Davis (1997:188) quoted Martha L. Edwards which reveals that the Greeks perceived deafness as an intellectual impairment, because of the difficulty in verbal communication that accompanies deafness. The obsolete expression ‘deaf and dumb’ is an apt description of the way in which a deaf person was perceived in ancient Greece. He says that the

etiology of deafness in modern world existed in ancient Greece also. He reveals that in Greek thoughts, the word ‘deaf’ was inextricably intertwined with an impairment of verbal communication. He tells that our present understanding of the Greek concept of deafness went hand in hand with muteness. He says about the Herodotus’ tale of Greece King Croesus who ruled the land of Lydia from 560 to 547 BC. The details of his two sons, Atys the elder and the second with deafness whose name is not known reveal the instance of a deaf person’s appearance in the surviving Greek literature. It reveals that his son with deafness regained his voice at the last minute in order to save his father from the pyre made by the captors. He also says that the instance of this one boy is not representative of the total population of hearing-impaired. Another important and related Greek assumption which can be inferred from the tale is that muteness indicated diminished worth. King Croesus literally discounts his deaf son. A deaf male child was perhaps as “worthless” as a girl and it was more so indicated in political sphere. Herodotus in his tale created an irony that Croesus gained an heir when he lost his kingship.

Throughout the Hippocratic Corpus, deafness is seen more as a valuable diagnostic tool than as a physical infirmity in itself. Aristophanes used hearing impairment as a comic vehicle. But hard of hearing old men, though portrayed comically, are never portrayed worthless. An important measure of a Greek man’s worth was his participation in the army or navy. The degree of one’s hearing loss never appears to be an important issue, but what mattered to the Greeks was one’s ability to speak. Athens and other island communities in Greece had a high incidence of deafness due to genetic causes. In those days, written language was not available to the average person in Greece. It is also true that vast population of the ancient world was non-literate. Herodotus could use “deaf” and “speechless” interchangeably. An

inability to speak went hand in hand with an inability to reason, which is also considered to be a mark of stupidity. Muteness was seen as a grave affliction and this can be traced with the literary examples from seventh century through the first century B.C. The works of Hesiod, Alcestis, and Diodorus reveals it. The word "Deaf" appears in the surviving Greek inscriptions almost exclusively as a curse, and a powerful one. Deprivation of hearing, because it meant a deprivation of verbal communication and perceived intelligence, meant separation from the political and intellectual arena. Life in Greece for anyone who did not speak must have been frustrating. While the consequences of deafness are synonymous with exile or death in the literature, it is important to remember that more people in the Greek world were interested in farming than rhetoric. While ineligibility in political and intellectual arenas may have been a hardship, the hardship is magnified out of proportion in the surviving material. Venetta Lampropoulou in the book titled "The history of Deaf Education in Greece" cited in "The deaf way" Ed. C. Erting et al (1995) suggests that deaf babies in Sparta were included among those with disabilities and discarded. There is no reason to suspect the practice of infanticide in deaf because the problem would not be detected until later. Margaret A. Winzer says ancient medicine seems to have made very little of the life of the newborn, and many early societies practiced infanticide. Aristotle in his politics said, "…let there be a law that no deformed child shall live". To the Greeks, children were the property of not of their parents; but of the commonwealth. But, it is possible that a child who was perceived as worthless would have received less than his share of necessities and thus eventually would have died. Though the words "Deaf" and "Speechless" were used interchangeably to refer to King Croesus son, a compound term like the word 'deaf mute' was not found in the vocabulary of ancient Greek.

Deafness in ancient Rome: The book by Lennard J. Davis (1997 :87, 91) quotes Margaret A. Winzer to say,“ a march through the centuries shows that disabled people were always the object of social concern, but whether community attention was a boon or liability depended on many different factors. No two societies viewed their disabled population in precisely the same way. Roman law also barred people who were without speech along with having deafness to undertake any responsibility of citizenship. In A.D.533, the Roman emperor Justinian had the five classes of deafness, ranging from those who were deaf but could speak to those totally without hearing and without speech. The declaration of St. Augastine in the late fourth century and early fifth century effectively denied church membership to deaf persons. They were restricted from the celebration of mass, disallowed the sacrament of communion, and generally excluded because they were unable to express their sins.

Deafness in ancient Egypt: The Egyptian Ebers papyrus (1550 B.C.) is reported in the book by Lennard J. Davis (1997:82) which contains the first known reference to deafness. The Egyptians in addition to knowing causes and cures of disabilities, they were also concerned with the personal and social well being of the afflicted. Among other categories, deaf persons garnered less regard and it is evident from the quote “There are no use wasting words upon the dumb,” succinctly commented one early Egyptian.

Deafness in ancient Europe and in U.S.A. The early legal code of nearly every European country imposed strict civil restrictions on disabled people. They were deprived of rights of inheritance, forbidden to testify in a court of justice, and not allowed to make a deed, contract, or will. Most disabled persons in medieval Europe seem to have led an insecure and precarious existence. Helen Keller knew well that the disabled people must confront not only their genuine physical and

psychological limitations, and also the institutional barriers that often exacerbate them, but also the revulsion of normal people who are unable to tolerate any hint of "disability" in them. Even today in extreme cases, children without language like "Genie" are treated as sub-human, and wild. Carol Padden in review of 'A man without words', by SusanSchaller, American journal of Psychology 105[1992]:652-53 writes that the "wild Children," such as victor and Genie lacked not just language, but also the ability to take part in life's social rhythm.

Deafness in ancient Tamil Land: If the ill treatment for persons with disabilities is an evolving and ongoing process even in this century, we cannot expect any better position or condition during valluvar's period. Similar concept and happenings would have been the prevalence of situation in Tamil Nadu and knowledge perceived during Thiruvalluvar's period. It is possible that valluvar did not like the way the deaf were ill treated then. The punishments like witchhunting, death sentence, social isolation etc would have been the practice at that time. This idea of valluvar could have been told to the best situation prevalent during his period of time. Even this kural could have been said to prevent such future occurrences of deafness due to consanguinity causes. Poet Avvaiyar, a contemporary of Valluvar also said that it is rare to be born as a human being and that too without any disability condition.

Common Socio-cultural issues of deafness in ancient period. The book by Lennard J. Davis (1997:188) quotes Margaret A. Winzer as saying that the treatment the members of any society extended to the exceptional person in their midst cannot be understood or evaluated in a vacuum. He also says that we must first know something about the physical and social conditions confronting all people in a society. In the thousands of years of human existence before 1800, life for most exceptional people appears to have been a series of unmitigated hardships. The great majority of

disabled persons had no occupation and no source of income. They had limited social interaction, and little religious comfort. Conspicuously abnormal persons were associated with superstition, myth, and fatalism- especially fatalism. Individuals seen as different were destroyed, exorcised, exiled, exploited or set apart because some were even considered divine. Throughout pre-modern history, the disabled population formed a small though resilient minority. A minority always exposed to the prejudices of the majority, not only because they could not partake of normal life; but also because they represented evil, or were seen as public threats. Being different, they drew cruel and callous reactions from society. The penalties society inflicted on them like legal sanctions, church expulsion, starvation, exile, or even death were too unevenly administered to exterminate all persons with disabilities. The book by Lennard J.Davis (1997:188) quotes Margaret A.Winzer as saying the following point. Pre- agricultural societies could provide little aid and minimal solace to disabled persons. Then, high survival rates are unlikely. Severely impaired individuals would have been incapable of enduring the hardships of nature. The disabled as a group was unable to hunt for food and not likely to detect dangers and ward off enemies. They as non-contributing members of the group would have constituted an economic hazard. With the advent of agriculture and urbanization, opportunities for disabled persons at least for mere survival seem to have increased.

Present day status of people with deafness. Though present day facilities for disabled group have improved positively, we can not say that all their problems are eliminated or solved. But the latest development in Science and Technology has brought many advancements and sophistication in disability management or rehabilitation. Invention of advanced medicines, sophisticated surgeries, amplification devices and instruments including Cochlear Implants have helped to overcome their

major part of hearing deficits. The development of refined and advanced teaching methods to impart speech and language therapy, special and regular education has helped to supplement the communication breakdown and the difficulties in academic learning. So, Valluvar's view for this problem may have to be considered for his period of time only. Kulandaiswamy V.C. (2002:XVI) in his book on Thirukkural says " most of the modern concepts and practices, considered simple and self evident today, did not exist at that time of Valluvar. The concepts of democracy, social justice, welfare, equality, dignity of human individual etc were unknown during Valluvar's time. Science and Technology in the form in which we know of it today is essentially a post Galileo phenomenon, and did not exist during Valluvar's period".

Because of all these developmental facts, Kulandaisamy (2002: XVIII-XX) said, "…any book can be subjected to an objective enquiry and it is valid for Kural also. One without any fear of losing his religion, or facing any serious ostracism, can accept or reject a part or whole of its idea. It is really healthy for an ideology or a concept or a theory to be subjected to a test every now and then for validity and relevance. Nothing that is living should claim immunity from enquiry into its applicability. Such preparedness will add to its strength. It is possible, that some couplets are free from the impact of contemporary influences and are relevant irrespective of time and place. But it is not easy to prepare a whole text of 1330 couplets on so temporal a subject as "The Art of living" and present the contents in a manner that they still hold well, in spite of the immense changes that have taken place. We hail those as sages or saints who almost intuitively show an insight into the nature of human society, a perception of its progress, an understanding of the permanent and the ephemeral: but how far can they anticipate the future. Valluvar was a product of the early stages of agricultural civilization which flourished, progressed

and developed for centuries, until humanity entered, towards the end of 18th century- the industrial civilization. The Science and Technology began and brought in momentous changes. The human society has seen upheavals and revolutions as all pervasive phenomenons. Starting from the middle of the 20th centuries, we have seen another breakthrough and have entered the era of knowledge. The development in nuclear science, the invention of computer, the adventurous space exploration, and the achievements in life sciences, have almost transformed the world and given it a new form and numerous new tools. Above all these developments, knowledge has emerged as a new resource that is renewable, that can be generated and augmented, and that can compensate for the absence of all other resources. Valluvar lived and wrote in the age of bullock cart. But, we are in the age of Boeings and Space vehicles where Science and Technology has advanced to a big level. Regarding the change of political systems, Valluvar lived at a time when monarchy was the only form of civilized government. But now monarchy has disappeared and the concept of welfare state governed by democracy has come to be accepted. At present, world over, democracy as the goal are considered as the norms of the day. The education pattern and levels also have changed. Knowledge doubles every decade. Now, universalisation of education is the objective of the world and human rights are considered as privilege and sacred. Now, because of all these changes, even the old questions need new answers. The old challenges need new preparations". Alexander Graham Bell is reported to have said, "One of the greatest achievements in the world is that of a child born deaf who learns to talk". Teaching a child with hearing impairment to talk is indeed a great achievement, and helping him to speak with ease and intelligibility represents one of the greatest challenges facing educators of the hearing impaired today.

Listening to Scholars, Babbling speech, and hearing conservation: Kural 415, 65 and 413 from Reference 121 to 123.

Reference No: 121. Kural 415 in Chapter 42 titled, "Listening-கேள்வி" gives importance to the listening of the intellectual words of wise and disciplined scholars.

"இழுக்கல் உடையுழி ஊற்றுக்கோல் அற்றே
ஒழுக்கம் உடையார்வாய்ச் சொல்". (Kural 415)

ஒழுக்கமுடைய சான்றோரின் வாய்ச்சொற்கள் வழுக்கல் உடைய சேற்றுநிலத்தில் ஊன்றுகோல்போல் வாழ்க்கையில் உதவும்.

"The counsel of the righteous, when heeded
Serves as a stick on slippery land".

When we walk on a slippery floor, a sturdy staff or a stick becomes very useful. Such a stick will help the weak person to walk safely even in difficult situations. Similarly the utterances of good words and oral percepts of the wise and disciplined scholar or a teacher become very important and useful. By reading good books, we can gain valuable knowledge. Sometimes lack of time, economy, or even situations may not permit us or restrict ourselves to have such an opportunity. In the absence of such situations of learning through the desired book readings, it is wise to gain knowledge through keen listening to the speech of disciplined scholars. Even the well educated people should not have the feeling of over-confidence in solving their problems. Their management skills can be still made better with the good listening of scholarly ideas. Even the well educated and skilled persons are advised to give due respect to other's views and ideas. Getting such ideas through counseling, guidance and utilizing those suggestions in their life situations, will help to overcome

difficulties. Since careful listening of ideas from a disciplined person can alleviate tiredness, anxiety, and sad feeling, a proper counseling becomes a must.

Reference No: 122. Kural 65 in Chapter 7 titled, “Worthy Children-மக்கட்பேறு” also tell about the hearing the infant’s speech - the babbling.

“மக்கள்மெய் தீண்டல் உடற்கின்பம்; மற்றுஅவர்
சொல்கேட்டல் இன்பம் செவிக்கு”. (Kural 65)

மக்களின் உடம்பைத் தொடுதல் உடம்பிற்கு இன்பம் தருவதாகும்; அம் மக்களின் மழலைச் சொற்களைக் கேட்டல் செவிக்கு இன்பம் தருவதாகும்.

“The touch of one’s children thrills the body
To ears their words are sweet melody”.

It says that touching the baby gives pleasure to both parents and children. Marilyn Segal (2001:140) say that touch is the first and most powerful way of reaching babies. Touching and stroking the newborn can provide a special kind of nourishment that fuels infant’s development. The touch sense gives a calming effect to crying babies and alertness to drowsy infants. Similarly listening to baby’s babbling speech gives pleasure to our ears and to the mind. Valluvar says that it gives a unique and mutual pleasant experience to us.

Reference No: 123. Kural 413 in Chapter 42 titled, “Listening-கேள்வி” says that those who enjoy verbal instruction are equal to Gods.

“செவிஉணவிற் கேள்வி யுடையார் அவிஉணவின்
ஆன்றாரோடு ஒப்பர் நிலத்து.” (Kural 413)

செவியுணவாகிய கேள்வி உடையவர் நிலத்தில் வாழ்கின்றவரே ஆயினும், அவி உணவைக் கொள்ளும் தேவரோடு ஒப்பாவர்.

"Men whose ears receive food thro' listening
Resemble gods served with offering ".

A person with the valuable capacity of good hearing can develop his intellectual function and enhance his knowledge. Such people will be free from sufferings and are easily comparable on par with divine forces. Their personal and social status will be much above the common man. It implies that good hearing is a blessing and care should be taken to protect it from possible damages like excessive noise, toxic drugs, viral infection, preventable diseases, mechanical manipulation of ear etc. Though conservation of all the body functions is required, hearing protection and conservation needs extra care and special attention.

Use of ability to combat disability (weakness).

Reference No: 124. Kural 504 in Chapter 51 titled,"Testing and Trusting- தெரிந்து தெளிதல்" talks about weighing one's abilities of good qualities and not his defects.

"குணம்நாடிக் குற்றமும் நாடி அவற்றுள்
மிகைநாடி மிக்க கொளல்". (Kural 504)

ஒருவனுடைய குணங்களை ஆராய்ந்து, பிறகு குற்றங்களையும் ஆராய்ந்து, மிகுதியானவை எவையென ஆராய்ந்து மிகுந்திருப்பவற்றால் தெளிந்து கொள்ள வேண்டும்.

"Analyse good and bad qualities
Strike a balance and choose".

A king before appointing a person for a job should analyse both good qualities and faulty weaknesses. Then the king can judge him with the prevailing merits. It is true that even the best of brains exhibit some ignorance. Since perfect people are not available in this world, a practical prescription is given in Kural. Likewise, children

during the developmental period may have some misarticulations and dysfluencies; which can be considered as normal variations for that age. Bloodstein as quoted by Charles Van Riper (1982:24) say that normally speaking children also show occasional stuttering behavior. The book by Charles Van Riper (1982:24) quotes Wendell Johnson to say that stuttering behaviors and normal dysfluencies differ only in degree. In the development of normal articulation in children, the maturation time differs according to the syllable. Hence, speech problems like normal nonfluency and misarticulations during developmental period should not be considered as a serious problem behavior and we should not make the child conscious about that mistake. Perfectionist parents may go in for correction at the child's conscious level during that developmental period. Such correction may affect the child's emotional status and he may develop more speech problems. Even the children with learning and other language disabilities may have many positive skills to prove their worth. In such cases few of these minor problems should be ignored and only positive behaviors should be valued. The safe way of managing this error is that we may have to correct the problem without his conscious efforts. Narayana Rao S. (2007:262) states that the objectives of counseling are to identify the problem areas or difficulties of individuals, their potentialities and limitations.

Face the challenges in its reality to gain confidence.

Reference No: 125. Kural 1102 in Chapter 111 titled, "Joy of Sex-புணர்ச்சி மகிழ்தல்" tell about the disease itself as a remedial cure for love affairs.

"பிணிக்கு மருந்து பிறமன்; அணியிழை
தன்நோய்க்குத் தானே மருந்து." (Kural 1102)

நோய்களுக்கு மருந்து வேறு பொருள்களாக இருக்கின்றன; ஆனால, அணிகலன் அணிந்த இவளால் வளர்ந்த நோய்க்கு இவளே மருந்தாக இருக்கின்றாள்.

"Remedy for all other illnesses is found elsewhere
For my illness caused by her, herself is the cure".

Usually the medicine or remedy for a disease is always something different from that of the disease. But, for all the miseries and problems caused by the jeweled maid as a lover; she herself is the cure. In similar lines, use of more and more talking in different situations is the better and main option to improve the language structure and to get a fluent speech in an individual with language delay or stammering. In dealing with speech problems, constant drill plays an important role. Since practice can make a person perfect, we have to talk more to develop language proficiency, fluency, and articulatory perfection. So, to counter the speech problems we have to speak more to rectify the mistake and to improve our communication.

All these above mentioned Kurals either directly or with implied meaning talked about the targeted topics in Speech, Language, Hearing and other Sensory inputs. Since there is no known earlier Kural study to compare the academic, clinical and research knowledge related to these subjects of Speech, Language, Hearing and other Sensory inputs; previous literature regarding familiarity and relevance of these Kurals could not be given. Regarding the survey approach, Narayana Rao S. (2007: 252) states that survey research is simple and is commonly employed in several disciplines. He says that survey approach consists of identifying the population and obtaining a representative sample from it, collecting information or evidence from the subjects in the sample, employing a suitable evaluative schedule and making judgements in terms of pre-determined criteria.

In this chapter, the scientific skills, poetic competency, intellectual capacity, and a thorough intuitive insight of ancient Tamil scholar Thiruvalluvar about the advanced human skill-concepts including Speech and Hearing were projected. Both the supportive and disputable literature connected with the topics were provided.

CHAPTER - 3

METHODOLOGY

This study utilized different methods, approaches, and surveys to test those hypotheses which are stated in introduction. The previous chapters described the introductory information, theoretical aspects, and related literature about this research project. This study also contained two critical surveys in which questionnaires were used to get objective data from field work across the cross section of people. This helped to overcome the personal prejudices and stereotype ideas. The information obtained from these avenues helped to draw inferences about the chosen kurals and the related topics.

The selection of Kurals: Thirukkural in its general expression has the unique distinction of dealing with almost all the topics of our life. But, this study focuses only the topics which are on Speech, Language, Hearing, and other Sensory inputs. All the 1330 Kurals were searched for their contents on Speech and Hearing subject. Kurals in both the explicit chapters “42 - Listening (கேள்வி)” and “65 - Power of Speech (சொல்வன்மை)” were taken for this study. In addition to this, kurals which were subjectively considered to have link either directly or with implied meaning to these topics of our interest were also selected for this study. These short listed Kurals were selected after going through popular books on Thirukkural and its English translations by different authors. Each of the selected one hundred and twenty five Kural poems and their related literature which are connected to the topics of Speech, Language, Hearing and other Sensory inputs were serially reported starting from Reference No: 001 and upto 125. The following poems were the shortlisted one

hundred twenty five Kurals coming in different Thirukkural chapters from all the three divisions that were selected as applicable for this study.

Table: 1. Details of selected Kurals and the Chapter

“VIRTUE” DIVISION

Kural Chapter #	Topics of Kural Chapter.	Kural Nos.
1	Glory of God- கடவுள் வாழ்த்து	1, 6, 9.
3	Greatness of Ascetics-நீத்தார் பெருமை	24, 25, 27, 28.
4	Insistence on Virtue-அரண் வலியுறுத்தல்	35.
7	Worthy Children-மக்கட்பேறு	65, 66.
10	Speaking Sweetly-இனியவை கூறல்	95, 97, 98, 99.100.
12	Impartiality-நடுவு நிலைமை	119.
13	Self Control-அடக்கம் உடைமை	126,127,128,129.
14	Discipline-ஒழுக்கம் உடைமை	139.
16	Tolerance-பொறை உடைமை	151,159,160.
19	Not Backbiting-புறங்கூறாமை	181,182,183,184,185,187.
20	Not speaking vain words-பயன் இல சொல்லாமை.	191,192,193,194,195,196,197,198,199,200.
28	Improper Conduct-கூடா ஒழுக்கம்	271.
30	Truthfulness-வாய்மை	291,292.
34	Impermanence-நிலையாமை	335.
35	Renunciation-துறவு	343.
36	Realizing the Truth-மெய் உணர்தல்	354.

WEALTH" DIVISION

Kural Chapter #	Kural Chapter Topics.	Kural Nos.
39	Regal Dignity-இறை மாட்சி	386,387,389.
40	Learning-கல்வி	392.
42	Listening-கேள்வி	411,412,413,414,415,416,417,418,419,420.
48	Assessing the strength-வலி அறிதல்	475,476,479,480.
49	Choosing proper time-காலம் அறிதல்	490.
51	Testing and trusting-தெரிந்து தெளிதல்	504.
52	Evaluating and employing-தெரிந்து வினையாடல்	514.
53	Cherishing relatives-சுற்றம் தழால்	525.
54	Not forgetting Duty-பொச்சாவாமை	534.
57	Avoiding Oppression-வெருவந்த செய்யாமை	564,567,568.
58	Benign Look-கண்ணோட்டம்	575,576.
63	Fortitude-இடுக்கண் அழியாமை	621.
64	Ministry- அமைச்சு	635.
65	Power of Speech-சொல்வன்மை	641,642,643,644,645,646,647,648,649,650.
67	Firmness in Action-வினைத்திட்பம்	664.
69	Envoy-தூது	682,683.
70	Association with Rulers-மன்னரை சேர்ந்து ஒழுகல்	694,696.
71	Mind reading-குறிப்பு அறிதல்	701,703,706.
72	Knowing the Assembly-அவை அறிதல்	711,712,713,714,715.
73	Not fearing the Assembly-அவை அஞ்சாமை	721.

79	Friendship- நட்பு .	783.
83	Undesirable friendship-கூடா நட்பு	824,826.
88	Assessing the Power of Enmity-பகைத்திறம் தெரிதல்	872.
96	Noble Birth-குடிமை	953,959.
104	Farming-உழவு	1040.
106	Begging-இரவு	1057.

"LOVE" DIVISION.

Kural Chapter #	Kural Chapter Topics.	Kural Nos.
110	Divining the Heart-குறிப்பு அறிதல்	1100.
111	Joy of Sex-புணர்ச்சி மகிழ்தல்	1101,1102.
113.	Glorification of Love-காதற் சிறப்பு உரைத்தல்	1121.
120	Pining Alone-தனிப்படர் மிகுதி	1198,1199.
121.	Sad Memories of Love-நினைந்து அவர் புலம்பல்	1203.
123	Evening Woes-பொழுது கண்டு இரங்கல்	1228.
126	Losing Self-Restraint நிறை அழிதல்	1253.
127	Longing for the Lover-அவர் வயின் விதும்பல்	1261.
128	Revealing the Mind- குறிப்பு அறிவுறுத்தல்	1271, 1274, 1275.
131	Sulking-புலவி	1302.
132	Nuances of Sulking-புலவி நுணுக்கம்	1312, 1317, 1318.

These selected poems comprised forty six out of three hundred and eighty Kurals in Virtue (அறம்) division, sixty two out of seven hundred Kurals in Wealth (பொருள்) division, and seventeen out of two hundred and fifty Kurals in Love (இன்பம்) division. Then these poems along with the meanings in Tamil and English translations were listed in different topic categories of Speech, Language, Hearing and other Sensory input subjects. Because of its simplicity and easy understanding, the Tamil meanings by Varadharasanar M. and the English translation by Rajaram M. were preferred for presentation. Though no explanation or translation can fully convey the real intentions of Thiruvalluvar, it is provided for better understanding of Kural. For the easy reference, Kural numbers were also given at the end of the poem.

Tamil speaking population can directly enjoy these Thirukkural poems and the academic scholars in literature will have extra liking for its literary merits. But, for the benefit of non Tamil group, Kural translations in their own language or in English are the only alternative avenue. But many people have pointed out the deficiencies in translating the contents of Thirukkural. Rajaram.M. (2009:Int.), the author of the English translation of Kural book states that no translation could render full justice to the original product. He also quoted the statement of Dr. Graul that no translation can fully convey the charming effect of Thirukkural. But on comparative terms, some translations are said to be better than others. Abdul Kalam A.P.J. in the forward message to the book, "Thrukkural- Pearls of Inspiration" written by Rajaram M. (2009: foreword) stated that the translation by Rajaram M. is unique in its simplicity, elegance, and maintenance of poetic rhythm on the lines of original Thirukkural. He also stated"…the translated couplets virtually provide the intended meaning conveyed

by Thiruvalluvar. This translation will certainly be useful to non Tamil speaking people to understand the richness of Tamil culture, civilization and its heritage". The interpretation of Kural by different authors varied according to their cultural background, traditional beliefs, professional activities and their background knowledge. Everyone explained it according to their own lifestyle, educational standards, occupational background and the community wherein they lived. The implied ideas of Kurals were so vast and subtle that even from the well known Tamil authors; the interpretation was different and varied.

Linking Kural expressions to modern scientific studies: Though various topics in Speech and Hearing have appeared in different chapters of Thirukkural, the selected Kurals were re-aligned in the following modern scientific topics.

Table: 2 List of Kurals and the assigned specific topic categories

Kural Numbers	Assigned topic categories.
1198	Speech and Social relationship.
95, 1121, 98, 97, 525, 387, 100, 99, 953, and 66	Pleasant sweet speech and its need.
198	Not speaking vain words.
826	Cunning speech.
649, 191, 721, and 645	Syntax structure and Semantics.
490, 644, 714, 715.	Pragmatic Language..
127	Regulated Speech.
694	Whisper and smile.
335	Doing things well in time.
711, 712, 713. and 872.	Understanding the audience.
194,192,193,195,196, & 197	Useless speech.
646	Diplomatic speech.
181 and 184	Back- biting speech.
650	Teaching skills.
292 and 291	Faultless falsehood.
959	Speech as a nobility index.
386 ,139,1057,199, 200,187,129.	Speech quality of administrators / kings.

35,696, 567,568.	Avoiding evil speech.
185,183,182, 824,	Incoherance between Speech and Actions.
128,119,	Effects of evil and Unbiased Speech.
647,641,635,28,682,564	Power of Speech.
1,392, 643,648, 642,	Speech, Numbers, Alphabets.
664,514.	Easy to tell and difficult to perform.
1100, 1274, 1271,701, 1253,1203, 1312,1317,1318,271,1040,621.	Non Verbal Communication
683,783	Reading skills.
475,479, 480, and 476.	Optimum function.
534	Poor memory.
575,576.	Vision with Kindness.
27	Multi-Sensory stimulation
1302, 24, 25,126, 6,343,354.	Sensory input regulation.
416,418,1199	Selective listening.
417	Wrong perception..
1228.	Conducive Environment for Perception.
1261, 9.	Sensory deprivation.
1101.	Simultanious Stimulation.
703,706,1275.	Signal detection through intuition.
389,151,159,160.	Tolerating criticism.
411,412 ,414	Wealth of Listening.
419. 420.	Hearing for Speech development & meaningful life.
415, 65, 413.	Listening to Scholar,Babbling, Hearing Conservation
504	Use of ability to combat disability.
1102.	Face the challenges to gain confidence.

The collected relevant modern scientific studies from academic, clinical, and research work in the field of Speech, Language, Hearing, and other Sensory inputs were linked to many of these Kurals. The available literature is used to support or to deviate and to dispute the views of kural expressions. The comparative analysis gave a chance to explain how Thiruvalluvar’s ideas are supporting, coinciding, or differing with the latest scientific knowledge of modern era. The sources of information and knowledge are gathered from books, journals, and magazines that are available in

personal possession, various libraries functioning in public establishments, colleges, universities etc. Internet avenues were also explored for getting literature.

Survey research on familiarity and relevance status: In this study, to give an objective and representative views from the public on the status of Kural familiarity and Kural relevance for modern day healthy life; two surveys were undertaken. In both of these surveys, questionnaires were used which consisted the general written instructions and a number of questions with choice for selecting their judgment answer. At the time of giving the questionnaire to the respondents, preliminary orientation and basic information were provided. Both of oral and written instructions were given to them for easy understanding. The questionnaire on familiarity was given first and the analysis was made. On a subsequent occasion at a later time, the questionnaire on relevance was given. Since the objectives, issues, and number of questions were different in both the questionnaires; respondents were specifically instructed accordingly. First the consent for the study was obtained from the respondent and the sample form is given in Annexure'C'. Then the respondents in both the surveys on the familiarity and on the relevance were asked to answer the questions based on their own personal perception and judgment without any prejudice and bias. These questionnaires were given to representative population in ten categories which included Medical specialists, Speech Pathologists and Audiologists, Special Educators, Teachers of Language subjects, Teachers of non Language subjects, College students, Individuals with disabilities, Parents and Family members of persons with disabilities, Persons working for disabled population, and General Public. These groups were assumed to represent the cross section of people who were directly or indirectly concerned with disability in general and speech and hearing in particular. The questionnaire provided an opportunity for the respondents to give

either positive, or negative, or neutral responses. In relevance survey, the choice for positive or negative score also had graded response. Unanswered responses either volitionally or by mistake were put as ‘no response’. Though false positive or false negative results could not be ascertained and monitored, the subjects were asked to look into the answers again to confirm or to verify them. As in practice, this questionnaire also contained a number of questions printed in a definite order and in a set of forms. A good care was taken in the construction of the questionnaire to make it simple and easy. No time limit was prescribed or enforced for their response. There was no restriction about the test environment and the freedom was given to the subject for his convenient response. The test environment was free and did not warrant any structured behavior. Only those who had studied at least up to SSLC and had Tamil as one subject were included in these surveys. This ensured that the subjects had at least basic knowledge about Thirukkural. Though the questionnaire was given mainly to people who were known to the researcher, other people who satisfied the specified criteria were also included. The response sheets were collected personally or by post.

Kural familiarity study: In the first survey study, an objective method was used by giving a structured questionnaire to find out the familiarity rating for all the selected Kurals. The questionnaire contained one hundred and twenty four Kurals which are related to Speech, Language, Hearing and other Sensory inputs. It was given to a representative population and a cross section of people in the above mentioned ten different categories that were directly or indirectly connected with Speech and Hearing topics. They were asked to judge and select the familiarity status by putting a tick mark in any of the following choices: ‘more familiar’, ‘less familiar’ and ‘not familiar’. At least four respondents were included in each category. This questionnaire was given to fifty subjects. In that, forty seven persons responded with

answers, one declined to participate in the survey and two did not return the questionnaire. The subjects were classified in the following ten categories.

Table: 3. Categories of the Respondents for familiarity survey

Sl. No.	Category	Total No. of Respondents
1	Medical specialists.	4
2	Speech Pathologists and Audiologists.	5
3	Special Educators.	4
4	Teachers of language subjects.	4
5	Teachers of non language subjects.	4
6	College students.	5
7	Individuals with disabilities	5
8	Parents & Family members of persons with disabilities.	5
9	Persons working for disabled population.	4
10	General Public.	7
	Total.	**47**

This questionnaire was intended to obtain the objective data about the familiarity status of selected Kurals. Familiarity ratings for all the Kurals were calculated and expressed in terms of percentage for ‘more familiar’, ‘less familiar’, ‘not familiar’ categories. Then these familiarity ratings for each of these Kurals and for each of these groups were analyzed. Unanswered or omitted responses either volitionally or by mistake were put as ‘No response’. The sample questionnaire form for familiarity is given in Annexure ‘E’ and in ‘Q’for reference.

Kural Relevance study: The second survey focused on finding the estimated level of relevance of Thirukkural concepts for the healthy life of modern contemporary society. It was given to a representative population and a cross section

of people in the above mentioned ten different categories who were directly or indirectly connected with the above topics in Speech and Hearing. This study brought out information about the way our contemporary society perceived and recognized the merits or problems of Kural. The need for this study is felt because many of us are ignorant about our ancestral skill-values and their scientific knowledge. Acquiring more insight about their heritage skill-values will help us to understand the science of 'Speech and Hearing' better.

After shortlisting those Kurals which enjoyed fifty percent and more of familiarity status from the familiarity questionnaire study, only sixteen popular and applicable kurals were selected. This selection was made by considering its familiarity, importance, and direct applicability for our day to day life activities. This restriction of Kural selection was necessitated to make this study of relevance short and simple in a concise form so that the efficiency of response is high. The respondents were asked to answer in a five point option scale to know its' relevance for modern day's healthy life. The five options given for answers are: 'strongly relevant', 'relevant', 'undecided', 'not relevant', and 'strongly not relevant'. All these selected sixteen familiar kurals which are related to the topic of Speech, Language, Hearing and other Sensory inputs were listed in a questionnaire and this included ten kurals from the division of 'Virtue' and six kurals from the division of 'wealth'. The sequencing list of this Kural presentation is done on the basis of increasing percentage of familiarity scores. Kurals starting with fifty percent of scores of percentage of familiarity was given first in the order and Kurals with maximum familiarity at the last. The Kural presentations were made simple by giving meaning in Tamil and the equivalent English translations. For each selected poem, the Kural number was given which helped the respondents to search for further needed additional information. The

questionnaire was given with a preliminary note of instructions to the subjects. Since the questions are short, they did not require a great memory to answer. The test environment was also flexible and did not warrant any structured behavior. They were asked to judge and select the relevance status by putting a tick mark in the given five point scale. At least four respondents were included in each category.This questionnaire on relevance was given to one hundred and fifty subjects among the cross section of population spread in ten different categories. Those who had studied at least up to S.S.L.C. and had Tamil as one language in their academic education were included in this study. Only one hundred and fifteen subjects responded our request and returned the response sheet. Out of the one hundred and fifteen answers received, three respondents from the group of parents and family members of persons with disabilities were rejected because they did not meet the minimum educational requirement standard of SSLC. The accepted respondents included eight Medical Specialists, eight Speech Pathologists and Audiologists, nine Special Educators, eight Teachers of Language subjects, fourteen Teachers of non Language subjects, eight College Students, four Individuals with disabilities, twenty one Parents and Family members of persons with disabilities, eight respondents working for Disabled populations, and twenty four General Public. In total one hundred and twelve response sheets of respondents were analyzed for relevance status. The sample questionnaire form for relevance is given in Annexure ‘F’ and in ‘R’for reference.

In addition to getting their name, address, and contact details, the questions in the questionnaire were also designed to elicit all the following demographic details and information: Age, Sex, Educational standards, Employment status, Geographical location, Their Familiarity status of each Kural, Their reason for Kural familiarity, Mothertongue, Exposure to other languages, Medium of educational instruction at

school and college level, the Class level up to which Tamil was studied as a language etc. The sample number, the category number and category type were also noted in each response sheet. No gender preference was contemplated in the selection of subjects. The analysis of this demographic data obtained from both of these surveys helped for getting useful information which can further lead to valuable research studies in future. The sample form for collecting demographic data is given in Annexure 'D' for reference.The scoring and interpretation of results were made with percentage of scores. The primary data from the simple random sampling survey method was collected by using questionnaire. From the results of these questionnaire studies**,** inferences were drawn for the status of familiarity and relevance of Kural for today's healthy life. The familiarity level and relevance level were calculated separately in percentage for each category group and for each Kural. Here the results of survey research for each of these Kurals and groups were discussed. Finally, the conclusions were drawn and expressed. The limitations of the study and recommendations for further research were also highlighted. Comparisons were made between different groups of categories, different Kurals, and demographic details. Appropriate tables with data and the graphical illustrations were also given.

The bibliography indicated the list of books, journals, periodicals, and the websites which were referred. The results of modern scientific studies on Speech and Hearing may be either from academic, or clinical, or research materials. These reports viewed in literature may either support, or alter, or reject the views of Kural. The Annexure contained all the tables and graphs used, applicable Kural details, consent form used for respondents, questionnaires used for familiarity and for relevance study, scoring sheets for different categories etc.

CHAPTER - 4

RESULTS AND DISCUSSION

The literature reviewed and the results of the questionnaire study revealed a lot of facts about Thirukkural and its connection with the modern subjects of Speech, Language, Hearing and other Sensory inputs. The following results are obtained in verifying the stated hypothesis.

Hypothesis 1: Thirukkural written about 2000 years back has reported a lot of scientific facts about the topics of Speech, Language, Hearing and other Sensory inputs.

From the books by Rajagopalachari C. (1947: XI), Kulandaiswamy V.C. (2002: IX), and Murugan V. (2009: III), it is evident that Kural was written about two thousand years back. The allotment of two exclusive topics "Listening (கேள்வி)" in chapter 42 and"Power of Speech (சொல்வன்மை)" in chapter 65 indicated that Thirukkural did talk well about the science of Speech and Hearing. In addition to that Valluvar also alludes to the science of Speech, Language, Hearing and other Sensory inputs in various other places which were stated well in the review of literature. The following paragraphs give the details of Kurals which talked about Speech, Language, Hearing and other Sensory inputs and also about the survey scores. The relevance scores were also given to those important Kurals which enjoyed fifty percent or more of familiarity scores.

Kural 1198 in Reference No: 001 indicates that the verbal language which is used either for communicative purpose or for social relationship became a crucial factor in keeping the interpersonal relationship alive, strong, and continuous. The

view given by Anne Van Kleek et al given in the book of Norman J. Lass (1988:675) supports this view. It indicates that communication ability influences and shapes the social relationship. In conditions like autism and deafness, the inability to maintain the required social relationship adversely affects even the development of basic communicative processes. The book of Norman J. Lass (1988:1023) quotes Barry M. Prizant while talking about social appropriateness. Krishna Mohan and Meera Banerji (1990:5) have cited many barriers in communication which includes the absence of common reference, un-clarified assumptions, mistrust and clash of attitudinal nuances between communicators, premature evaluation of message, and different perception of the reality. So, it can be concluded that the interactive speech becomes essential for maintaining a good social relationship. Since only 21.27 % of our subjects were familiar with this Kural, it was not taken for the objective relevance survey study.

Sweet speech is explained in Kurals 95, 1121, 98, 97, 525, 387, 100, 99, 953, and 66. Kural 95 in Reference No: 002 say that humility and the use of sweet words add beauty to our regular Speech. The study of Brown et al as reported by Howard S.Friedman supports this view. The surveys showed that 51.06% of respondents were familiar with this Kural and was felt to be strongly relevant by 91.07% of people. (43.75% felt strongly relevant, 47.32% felt relevant, 5.35% felt not relevant 0.89% felt strongly not relevant and 2.67 % were undecided). Kural 1121 in Reference No: 003 say that the possession of positive soft speech is an important, distinguished, and welcome character for any individual.This adds merit to the available routine communication process. Only 21.27 % of our subjects were familiar with this Kural. Kural 98 in Reference No: 004 reveal that the sweet speech is free from evil thoughts and harmful effects to others and such traits will be carried out to subsequent generations. In support of this view, the modern studies as reported by Norman J.

Lass (1988: 624) and Sri Aurobindo (2007:23) are cited for the possible genetic basis. Only 23.40 % of our subjects were familiar with this Kural. Kural 97 in Reference No: 005 say that pleasant, sweet, and courteous speech will bring goodness, happiness, and prosperity; and on the contrary, the harsh words will definitely arouse resentment. Only 21.27 % of subjects were familiar with this kural. Kural 525 in reference No: 006 says that generosity and polite Speech can be used for social attraction. Whoever has such a speech and charity will have a big social network and always be surrounded by numerous relatives and friends. Only 14.89% of our subjects were familiar with this Kural.

Kural 387 in Reference No: 007 say that pleasant speech is a good attribute and adds enormous value even to Kings. Only when one's body and mind are relaxed and the environment is conducive, such a pleasing utterance can be expected from somebody. The lack of pleasant speech makes a negative impact. The use of the words "இன்சொல்" in this poem and "பணிமொழி" in poem 1121 indicate that he differentiates the quality of language from the speech structure. The modern science also talks about this division. Only 12.76% of our subjects were familiar with this verse. Kural 100 in Reference No: 008 advocates avoiding the use of harsh words. He advises us to use the best of the choice-words in our speech for progress and development. Our survey results showed that 100% of our subjects were familiar with this Kural. Regarding the relevance judgment 91.96% of people felt it was relevant to our present day happy life. (62.5% felt strongly relevant, 29.46% felt relevant, 2.67% felt not relevant, and 4.46 % were undecided. 0.89% failed to score it). Kural 99 in Reference No: 009 use a technique of carrying conviction in which he questions the need to use harsh and evil words. So, it is understood that strong arguments with abusive language and harsh words should be avoided. Only 27.65% of our subjects

were familiar with this couplet. Kural 953 in Reference No: 010 say that the capacity to use pleasing words in speech is one of the best attributes of true nobility. All the four expressions of cheerful countenance, liberality, pleasant words, and an unraveling disposition of this Kural denote the functional capacities and they are given importance over the body structure possibly on priority basis. Except for charity, no other task requires any financial expenses. Even in this category, 'charity of knowledge' can be done without any economic liability. Irrespective of social order or economic status, anybody who develops these good qualities can raise to attain nobility. Only 21.27 % of our subjects were familiar with this Kural.

Kural 66 in reference No: 011 says that compared with all available pleasant instrumental musical tunes of the world; the prattle of a small child is sweeter. Here, among all the sound qualities; children's voice and particularly their own descendant's expressions are highlighted as supreme. If the rudimentary babbling and the emerging speech of children can achieve this distinction, no doubt a mature conceptual Speech and Language output of a child will be much better. George Yule (1996: 139-140) says that 'Cooing' and 'Babbling' of a child contributes to social interaction. Results indicate that 76.59% of our subjects were familiar with this Kural and the Kural was felt strongly relevant by 82.13% of people. (58.92% felt strongly relevant, 23.21% felt relevant, 5.38% felt not relevant 0.89% felt strongly not relevant and 10.71% reported to be undecided. 0.89% of people failed to score on this judgment). Kural 198 given in Reference No: 012 says that wise people weigh the profit of their every utterance and use only meaningful, significant, worthy words. Even in lapsed conditions they will not speak useless words. Only 25.53% of our subjects were familiar with this Kural. Kural 826 in Reference No: 013 indicate that foes may deceive us with cunning speech and their evil intentions may spoil our

progress and advancement.Thiruvarutprakasa Vallalar also speaks about this in his poems. Only 23.40% of our subjects were familiar with this Kural.

Kurals 649, 191, 721 and 645 advocated correct use of vocabulary in expression.

Kural 649 in Reference No: 014 stress the importance of using appropriate words in speech. This goes well with modern studies quoted by Cynthia L. Jones et al (2005:15), Eldon E., Ekwall, and James L.Shanker (1983:7), Norman J. Lass (1988:719), Roberta Chapey (1986:465). Only 12.76% of our subjects were familiar with this Kural. Kural 191 in Reference No: 015 tell us to use the right words for good expression**,** and the consequences of failing to do so. The utterance of useless words is disgusting and may result in getting despised. Norman J. Lass et al (1988:867) quoted the study of Mary Joe Osberger et al which supports this view. Only 12.76% of our subjects were familiar with this Kural. Kural 721 in Reference No: 016 tell us to use the right words boldly in an assembly. Otherwise we might falter because of fear. So, a strong vocabulary with sound knowledge is essential for gaining courage. Study by Charles Van Riper (1982: 145) indicates the most common feeling of fear in advanced stutterers. Only 21.27% of our subjects were familiar with this poem. Kural 645 in Reference No: 017 tell us about the importance of using the appropriate word in our speech. It will make one’s expression strong and will indicate the level of his conceptual growth. One should make sure that the word uttered in a debate cannot be refuted by any argument from the opponent. Norman J. Lass (1988:719) quotes the study of word finding difficulties in children with language disabilities. He also quotes Wiig and Semel indicating that the difficulties in word finding are likely to result in problems with expressive syntax and word order.These findings are in confirmation with the views of Valluvar.

Kurals 490, 644, 714 and 715 advise to utilize the right opportunities.

Kural 490 in Reference No: 018 tell us to grab the right and favorable opportunity with swiftness to achieve success with out a fail. This view holds well on all occasions including language use. Only 42.55% of our subjects were familiar with this poem. Kural 644 in Reference No: 019 speak about the superior virtue of pragmatic speech.We have to understand the qualities of our listeners to make an appropriate speech. Margaret Lahey (1988:2) indicates that the communicative language will vary according to the purpose, topic, utterances by co-speakers, type of audience, and environmental changes etc. Only 36.17% of subjects were familiar with this poem. Kural 714 in Reference No: 020 ask us to adapt our speech discourse to suit the prevailing situation and the audience type. Only 8.51% of our subjects were familiar with this poem. Kural 715 in Reference No: 021 bring to light the merit of turn taking. We have to be polite and humble while expressing our views and should not rush for chances. The study by Roberta Chapey (1986:227) says that the reciprocal nature of communication involves a number of aspects including the initiation of the speech act and the maintenance of communication. Only 4.25% of our subjects were familiar with this Kural.

Kural 127 in Reference No: 022 speak about controlled speech output and using only those words which are acceptable to others. In spite of our powerful position, we should restrain and guard our words. Otherwise errors of speech and the consequent misery will ensue and we would have to suffer for having used an unethical or unpleasant word. In line with Valluvar's idea of guarding the words, Peter J.Valletutti et al (1985:8) also says that the teacher should remain calm and poised, no matter what happens. Our survey result shows that 100% of our subjects were familiar with this Kural. Regarding the relevance judgment, 95.53% of people

felt that it was relevant to our present day happy life. (69.64% felt strongly relevant, 25.89% felt relevant 0.89% felt not relevant and 0.89% felt strongly not relevant. 0.89% were undecided. 1.79% failed to score it). Kural 694 in Reference No: 023 say that in the group discussion or at a meeting, a short circuited internal communication like whisper and smile has to be avoided. The study by Premakumari C.B. (1992:49) speaks about whisper. The research by Peter J.Valletutti et al (1985:9) also tells us about the hostile or sarcastic classroom humor. Krishnamohan et al (2004:47, 48) cites the problems of whisper in a meeting. Only 25.53% of subjects were familiar with this poem. Kural 335 in Reference No: 024 say that we should not wait and buy time for doing good virtuous deeds. This becomes very important in our speech communication because it can get affected suddenly at any time of our life. If one gets a hiccup and his tongue gets tied, he may not be able to speak or do whatever he wants to do. Donald W. Warren as quoted in the book by Norman J. Lass (1988:211, 212) says that the speech process involves many complex behaviors that are controlled in a precise way. The requirement of high degree of integration and coordination of central and peripheral systems is recorded for a good speech output. Only 6.38% of our subjects were familiar with this Kural.

Kurals 711, 712 and 713 insist making the speech according to the audience.

Kural 711 in Reference No: 025 want us to make a note of the assembly and adopt a style of speech with right words to suit that audience. Only 46.80% of our subjects were familiar with this poem. Kural 712 in Reference No: 026 also speak of the importance of framing a faultless speech according to the need and nature of the audience. A good speaker should have a clear understanding of the topic, receptivity of the audience, and the knowledge to use the appropriate words. Margaret Lahey (1988:17) says that when engaged in social exchanges with other persons, one must

know how to initiate, maintain, and terminate a conversation. Only 17.02% of our subjects were familiar with this poem. Kural 713 in Reference No: 027 speaks about inadequate framing of speech which does not match the need, expected word power, order of words, prevailing situations and the expected impact to the nature of the audience. Only 21.27% of our subjects were familiar with this poem. Kural 872 in Reference No: 028 say that even if we develop hatred towards warriors, we should not hate the ministers whose strength is their words. Only 19.14% of subjects were familiar with this Kural.

Kurals 194, 192, 193, 195, 196 and 197 talks about problems caused due to useless Speech.

Kural 194 in Reference No: 029 say that the use of words which are without virtues or good meaning may force a person to be considered useless. Only 31.94% of our subjects were familiar with this poem. Kural 192 in Reference No: 030 say that the practice of useless speech in the presence of many people is much worse than betrayal and will bring terrible results. Only 23.40% of the subjects were familiar with this Kural. Kural 193 in Reference No: 031 say that if a man utters useless words, he will be a figure of fun and will be projected as virtue-less. Only 21.27% of our subjects were familiar with this poem. Kural 195 in Reference No: 032 say that inspite of his good image; if he uses vain words he will lose eminence, excellence, and status. Only 19.14% of subjects were familiar with this Kural. Kural 196 in Reference No: 033 say that a person who repeatedly uses unnecessary speech can be considered as a waste product in humanity. Only 31.91% of subjects were familiar with this poem. Kural 197 in Reference No: 034 tell us that wise people even if they fail to speak something excellent, will avoid useless speech. Only 42.55% of our subjects were familiar with this poem. Kural 646 in Reference No: 035 reveal that a

diplomatic speech will not only motivate the listener, but also will understand the meaning of other's speech. Only 6.38% of the subjects were familiar with this Kural.

Kural 181 and 184 tell about backbiting.

Kural 181 in Reference No: 036 says that even if a person does not follow virtues and always indulges in sinful activities, it will be better for him to avoid talking ill of others. Only 34.04% of subjects were familiar with this poem. Kural 184 in Reference No: 037 tell us to avoid the folly of attacking somebody behind his back. In the absence of a person, we should avoid talking ill of him. Only 31.91% of our subjects were familiar with this poem. Kural 650 in Reference No: 038 say that people who lack teaching skills are compared to flowers blossoming in cluster without any fragrance. Inspite of having good academic knowledge, they will not help others to learn. Study by Philip Cartwright G. et al (1985:420) speaks about the required qualities of a teacher. Lyndall Rich H. (1982:217) quotes Smith et al for revealing the importance of a teacher. Only 12.76% of our subjects were familiar with this Kural.

Kural 292 and Kural 291 speak about the benefits of faultless falsehood.

Kural 292 in Reference No: 039 say that if falsehood confers a faultless benefit, it may be classified with truth. It can be equated with placebo effects which are used in medical care. Kulandaiswamy V.C. (2002:80-81) says that it is a down-to-earth, absolutely practicable definition of truth and will be valid in any society at any time. In Kural, such pragmatic but morally sustainable approaches to all issues of life are seen. Though 78.72% of our subjects were familiar with this Kural, it was not taken for relevance study. Kural 291 in Reference No: 040 say that truth is speaking of those words which are free from the least degree of evil to others. Truth is also subjected to the additional test of harmlessness. Though our survey shows that

89.36% of our subjects were familiar with this Kural, this was not taken for relevance study.

Kural 959 in Reference No: 041 say that speech can be a reflection of one's birth and his noble status. Though 'Kulam (குலம்)'' in Tamil indicates the commonly prevailing caste concepts of social order and hereditary status of birth, but the environmental factors can also find a place in that expression. When we say 'human race' it does not directly mean or represent the genetic aspect only. Thiruvalluvar's use of this term is not explicit in its expression and can be interpreted according to the individual's view point. But speech can be the product of both genetic aspect and environmental factors. The marvelous and non controversial handling of such words by Thiruvalluvar is exemplary in his expression and indicates the merit of Tamil language. The biological basis for language development is reported by Chomsky, and also Piaget. Bio-socio-cultural learning theories are reported by Anne Van Kleek et al. Only 14.89% of our subjects were familiar with this Kural.

Kurals 386, 139 , 1057 , 199, 200, 187, 129, 35 , 696 , 567, 568 , 185, 183, 182, 824, 128, 119, 647, 641, 635, 28 and 682 speak about Speech qualities of ministers.

Kural 386 in Reference No: 042 say that the whole world will exalt the country whose king is easily accessible and who is free from harsh language. Any state with such credits will attain fame. Only 25.53% of our subjects were familiar with this poem. Kural 139 in Reference No: 043 say that well behaved people who study the propriety of conduct and with high values will not use unacceptable evil words even by mistake. Only 31.91% of our subjects were familiar with this poem. Kural 1057 in Reference No: 044 explain that even beggars will praise and rejoice at

those who bestow their alms with kindness and courtesy. Only 25.53% of our subjects were familiar with this verse. Kural 199 in Reference No: 045 say that wise men will speak without faults in their speech. Even forgetfully, they will not speak matters that are not profitable. Only 14.89% of the subjects were familiar with this poem. Kural 200 in Reference No: 046 insist on uttering useful speech and advise to avoid useless words. Survey showed that 82.97% of subjects were familiar with this Kural. Regarding the relevance judgment 91.96% of people felt it relevant to our present day happy life. (53.57 % felt strongly relevant, 38.39% felt relevant, 4.46% felt not relevant, 0.89% felt strongly not relevant. 1.79% were undecided. 0.89% failed to score it)

Kural 187 in Reference No: 047 say that a good friendship can be maintained by cordial communicative process. Only those people who fail to understand this fact will break even the existing good relationship by using insulting speech and amusing conversation. Only 14.89% of subjects were familiar with this poem. Kural 129 in Reference No: 048 say that unlike a burn injury, the hurt feeling caused by an insulting speech will remain forever in the mind of the affected person. This indicates that people can forget physical injuries but will not forget or forgive an emotional onslaught or social insult. Our survey results showed that 95.74% of our subjects were familiar with this Kural. Regarding the relevance judgment, 94.64% of people felt it relevant to our present day happy life. (71.43 % felt strongly relevant, 23.21% felt relevant, 1.79% felt strongly not relevant. 0.89% were undecided. 2.69% failed to score it). Kural 35 in Reference No: 049 say that we can achieve virtue by avoiding envy, desire, anger, and bitter speech. So, to be morally good, it becomes very important to avoid evil speech. Survey results showed that 55.31% of our subjects were familiar with this Kural. Regarding the relevance judgment 87.5% of people felt

it relevant to our present day healthy life. (53.57% felt strongly relevant, 33.93% felt relevant, 6.25% felt not relevant, 4.46% felt strongly not relevant, and 1.79% were undecided). Kural 696 in Reference No: 050 also speak about the correct use of effective speech with appropriate timing and situation. Only after knowing the king's convenience for disposition like the apt situation and desirable time, the minister should intervene and discuss issues with him. The desirable matters should be put in a pleasing language and should be used in an acceptable way. Only 25.53% of our subjects were familiar with this Kural.

Kurals 567 and 568 speaks against the use of harsh speech.

Kural 567 in Reference No: 051 say that bitter words and excessive punishments used by the kings will reduce the king's power of resistance against his enemies. These negative qualities can demoralize his courage and spoil his victory chances. Only 10.63% of our subjects were familiar with this poem. Kural 568 in Reference No: 052 say that some kings neither listen to nor value the ideas and the advice of ministers or scholars. This might result in failure and he might get angry. Subsequently, he might resort to harsh words which might result in losing all his wealth and fame. It implies that to render good justice, a king should listen to the inputs from the council of ministers and scholars. Only 8.51% of our subjects were familiar with this Kural.

Kural 185, 183, 182 and 824 tell about the incoherence between speech and action.

Kural 185 in Reference No: 053 says that people who praise a person in his presence and talks ill of others in their absence will not have a coherent and coordinated connection between their speech and actions. Such persons are not

concerned about the welfare of others. Only 19.14% of subjects were familiar with this poem. Kural 183 in Reference No: 054 say that talking ill of others in their absence, and praising them in their presence is a bad habit and it accounts for a false life. As it is not considered a virtue, he questions the very existence of such people. Only 25.53% of our subjects were familiar with this poem. Kural 182 in Reference No: 055 say that praising and deceitfully smiling at somebody in their presence; but reviling him with an aim of destruction are worse than directly decrying him. This will be a greater evil than any other sin or the destruction of virtue. Only 12.76% of our subjects were familiar with this poem. Kural 824 in Reference No: 056 also say that a cheat with a deceitful smile on their face and not having any love in their heart is very dangerous and one should avoid having friendship with him. Chidambaram Ramalinga Adigalar in song eight of Theivamanimaalai (1973:4) also pointed out this by saying that we should not develop friendship with such cunning people (உள்ளொன்று வைத்துப் புறம்பொன்று.....). Only 23.40% of subjects were familiar with this Kural.

Kural 128 Reference No: 057 says that a person's even once attempted single evil speech could have been productive. But that alone is enough to make all his earlier good deeds into evil. Only 17.02% of subjects were familiar with this poem. Kural 119 in reference No: 058 says that only those who do not have any crooked thinking and bias in their mind, will have plain speech without any prejudice. Only 10.63% of our subjects were familiar with this poem. Kural 647 in Reference No: 059 say that a convincing style of debate, untiring speech, a good memory and fearlessness will make a councilor invincible. To achieve this skill, he has to be strong in his language and should not have any fear to talk. Helen Keller (2003:48) in her book states "…one who is entirely dependent upon the manual alphabet has always a

sense of restraint, of narrowness". She also says that it is an unspeakable boon to her to be able to speak in winged words that need no interpretation. Only 42.55% of our subjects were familiar with this poem. Kural 641 in Reference No: 060 say that a good persuasive speech is a unique, positive, and essential quality of a successful councilor and is more important than many other good skills. From this we can understand that the ancient Tamil kingdom had a good administrative set up in which right decisions were taken after a debate in the assembly. Even in those authoritative days of monarchial Tamil Kingdom, democratic principles and debate were much in practice. Even Aristotle's notion of skills indicates that speech was divine. Only 29.78% of our subjects were familiar with this poem. Kural 635 in Reference No: 061 states that a person with good virtues, high thinking, rich knowledge, superior vocabulary, and excellent action were considered to be fit to be a minister and can offer the best administrative help to the king. Only 23.40% of our subjects were familiar with this Kural.

Kural 28 in Reference No: 062 say that speech functions can be the basis for one's academic accomplishments, social strengths, and skill achievements. Since communication skill can definitely be a yardstick to judge his skill competency in this world, speech and language functions can enhance his fame and prestige. Our survey results showed that 51.06% of our subjects were familiar with this Kural. 79.46% of people felt it was relevant to our present day happy life. (34.82% felt strongly relevant, 44.64% felt relevant, 3.57% felt not relevant 1.79% felt strongly not relevant. 7.14% were undecided and 0.89%failed to score). Kural 682 in Reference No: 063 speak about the required devotion and love to one's sovereign nation and to the king. A thorough knowledge of prevailing political situation of a country, effective speech output and critical thinking are the main and essential qualifications

for all envoys. Speech as an absolute quality of envoys signifies its importance. Only 17.02% of our subjects were familiar with this poem. Kural 564 in Reference No: 064 say that the king who receives the critical feedback comments as cruel, sadistic and offensive from majority of his citizens will perish quickly. The life of such kings will be shortened and will soon meet with their own destruction. Only 10.63% of our subjects were familiar with this poem. Kural 1 in reference No: 065 gives an analogy of alphabets to the worship of God. By this, he gives Godly status to language. Another merit to the topic of 'language' is that it is said in the very first poem itself. It says that as Tamil alphabets starts with 'அ', the entire world starts with the eternal God as its first personality. Our survey results showed that 95.74% of our subjects were familiar with this Kural. Regarding the relevance judgment, 88.42% of people felt it relevant to our present day happy life. (55.38% felt strongly relevant, 33.04% felt relevant, 2.67% felt not relevant 3.57% felt strongly not relevant.3.57% were undecided and 1.79% failed to score.)

Kural 392, 643, 648 and 642 tell the importance of numbers, letters, and speech.

Kural 392 in Reference No: 066 explain the importance of numbers which is the basis of mathematics, and letters which is the basis of literary creations in language and also in education. Since these two aspects of numbers and letters are precious possession of mankind and can enhance one's knowledge and thinking, it is essential to skillfully learn both of them. Kulandaiswamy V.C. (2002: 38 - 44) says, "Valluvar had the vision to look into the future as well as the nature of challenge and progress that human society may undergo in later years. Till recent days letters obviously dominated the scene. But it becomes evident that in the modern world, the entire progress we have made in Science and Technology is based on mathematics". He also says, "it is astonishing and even intriguing that the Tamils have chosen to use

the same word "எண்" for numbers, mind, thought and mathematics". Survey results showed that 82.97% of our subjects were familiar with this Kural. Regarding the relevance judgment 73.21% of people felt it relevant to our present day happy life. (38.39% felt strongly relevant, 34.82% felt relevant, 6.25% felt not relevant, 4.46 % felt strongly not relevant and 16.07% were undecided). Kural 643 in Reference No: 067 say that a good orator's speech should have the capacity to bind a relationship with the listener fast and sustain it. Even for the unconvinced audience and enemies, it should be pleasing in nature and create a desire for developing the speaker's friendship. Only 42.55% of subjects were familiar with this Kural.

Kural 648 in Reference No: 068 says that it is rare to have the the councilors who can speak on various subjects in a proper order and also in a pleasing manner. He says that the world would readily accept those councilors without losing any time. Only 21.27% of our subjects were familiar with this poem. Kural 642 in Reference No: 069 say that speech can bring either successful positive results like wealthy gain or failure with negative impacts like evil loss. So, it is advised that ministers should be careful in guarding themselves against any faulty speech. Even students and job seekers can have this in mind while attending interviews and avoid getting into defective speech. So, the administrators should take great care about their speech, because it determines the prosperity or the ruin of the whole state. Only 31.91% of our subjects were familiar with this Kural.

Kural 664 in reference No: 070 speaks about the difficulties in transforming the speech into meaningful and useful activities. Anyone can formulate plans, but only exceptionally good people can carry their plans to fulfilment. Our survey results showed that 76.59% of our subjects were familiar with this Kural. Regarding the

relevance judgment 92.85% of people felt it relevant for our present day happy life. (60.71% felt strongly relevant, 32.14% felt relevant, 4.46% felt not relevant. 2.67% were undecided). Kural 514 in Reference No: 071 talks about the requirement of both training and the aptitude for preparing a person for a specific job or particular trade with skill-excellence. Constant training and intensive drill can bring better speech in patients with speech and language problems. Of course, their motivation plays a big role in bringing the required improvement. Narayana Rao S. (2007: 281) reported about altering the existing job or giving training to a new job. The book of Deena K.Bernstein (1989: 208, 226) quotes the study of James McLean and talks about designing and applying an intervention program for communication problem. Only 8.51% of our subjects were familiar with this Kural.

Kural 1100 , 1274 , 1271 , 701 , 1253 , 1203, 1312, 1317, 271, 1040 and 621 tells about Non-Verbal Communication.

Kural 1100 in Reference No: 72 reveal that when there is communication through eye contact, the oral speech becomes useless. The eye contact can express and communicate a lot of ideas than what words otherwise could tell. Individuals with hearing impairment are good at eye contact, whereas children with autism lack this skill. The book by Jack Katz (1985: 1001) quotes the study by Miriam Krantz which tells much about the importance of visual communication. Only 42.55% of our subjects were familiar with this poem. Kural 1274 in Reference No: 73 say that the silent smile is like the covered fragrance present in an un-blossomed bud. The smile of a lover conveys a lot of messages to the partner. Only 8.51% of our subjects were familiar with this poem. Kural 1271 in Reference No: 074 say that though one would like to conceal his inner feelings and avoid expressing his intentions overtly, his disturbed eyes and body language will expose some underlying facts. This is why,

face is called as the index of mind. So to avoid this conflicting expressions; it is warranted to keep our thoughts, speech and actions together in the same wavelength. Only 8.51% of our subjects were familiar with this poem. Kural 701 in Reference No: 075 say that the minister with the skill to read and understand the king's mind by looking at the king's body language alone will be a perpetual ornament to the world. Since body language provides only abstract concepts, it requires more skill to understand them. Krishna Mohan and Meera Banerji (1990: 9, 36) say that visible codes also have a good role in communication. Only 10.63% of our subjects were familiar with this Kural.

Kural 1253 in Reference No: 076 by giving an analogy of sneeze**,** tells the difficulty in controlling the lust. Since its manifestation goes well beyond our volitional control, we cannot conceal it. Only 8.51 % of our subjects were familiar with this poem. Kural 1203 in Reference No: 077 talks about the dilemma of thought process among loving partners at the time of sneeze. There is a belief in Tamil culture that if we get a sneeze, it means someone is thinking of us. When a fit of sneeze is threatened and vanishes before completion, a lover may have a doubt about the possibilities of partner's thought about him / her. Only 14.89% of our subjects were familiar with this poem. Kural 1312 in Reference No: 078 say that a temporarily suspended communication between the lovers is expected to begin with a non-verbal mode like a sneeze. If one sneezes, it possibly indicates that some close relative or friend is thinking about that person. A blessing message for a long life is also expressed by the companion. But when lovers are in feigned anger, they do not usually speak freely with each other. At that time, in order to get a breakthrough by getting a blessing message from the lover; he may pretend to sneeze. Here the temporarily stopped communication is expected to begin with a non verbal mode.

Only 10.63% of our subjects were familiar with this poem. Kural 1317 in Reference No: 079 say that these communication methods like a sneeze might end up in doubting the integrity of the loving partner. Though she blesses the lover after the sneeze, she may have her own doubt about the lady who triggered his sneeze. Only 12.76% of our subjects were familiar with this verse. Kural 1318 in Reference No: 080 also speak of lover's doubt about the partner's real intentions of the suppressed sneeze. She thought that he suppressed his sneeze to hide his thoughts about some other lady. Non- verbal communication on many times is abstract in nature and does not express explicitly. Only 12.76% of our subjects were familiar with this Kural.

Kural 271 in Reference No: 081 talks about smile as a non verbal Communication. When we secretly break the law of celibacy and though others do not detect that shameful crime; at least the five senses of our body will laugh at us for doing the secret futile fraud and for living a false life. Only 14.89% of our subjects were familiar with this poem. Kural 1040 in Reference No: 082 also talks about smile. It says that the maiden earth will laugh at those people who lead an idle life due to laziness. When there is land to cultivate which can be as productive to the measure of one's labor, it is foolish to bewail one's destiny and remain idle and poor. Because of this foolish act, any such person is bound to be drowned in poverty. In many places, Thiruvalluvar gives such inanimate references. Only 31.91% of our subjects were familiar with this poem. Kural 621 in Reference No: 083 speak about having the optimistic approach even during difficult times. Valluvar asks us to laugh even during the situations when we come across unfortunate events or when we get into trouble. This approach will help us to drive away sorrow and to achieve victory. Though our survey results show that 76.59% of our subjects were familiar with this Kural, it was not taken up for relevance study.

Kurals 683 and 783 speak about Reading Skills.

Kural 683 in Reference No: 084 talks about the required reading abilities of envoys. The knowing of real and latest news in depth about all the ethical issues and political matters will make an ambassador more powerful and strong. This skill can be achieved by good reading and that will be the main and most wanted capability and character of the envoys. Studies by Sri Ramakrishna Paramahamsa and others as quoted in the review tell us about the importance of reading skill. Only 8.51% of our subjects were familiar with this poem. Kural 783 in Reference No: 085 compare the act of continuously maintaining the good friendly relationship with noble persons to that act of the valuable reading of good books. He says that more beauty and enhanced pleasure can be enjoyed by repeated readings of books in depth and also in maintaining friendship. So, reading can be more delightful and useful. Only 40.42% of our respondents were familiar with this Kural.

Kural 475, 479, 480 and 476 covers optimum level functioning and overloading.

Kural 475 in Reference No: 086 reveal the breakdown of a structure or a function due to overloading and the resultant strain. In Speech Pathology, loss or defect in voice due to laryngeal hyper-function is reported. The book by Norman J. Lass (1988:822) quotes Boone and explains the elimination of dysphonia by avoiding vocal abuse. The factors like over stress, and over protection can also cause problems in speech and language production or development. Exposure of too many languages for children with developmental delay can cause the problem of underachievement. Excessive pressure and over-expectation can result in stammering, normal non-fluency etc. Spastic dysphonia can be the offshoot of this type of excessive emotional stress and related problem. In Audiology, noise induced hearing loss or acoustic

trauma can be due to exposure to loud noise. In physical health, overweight in children must be considered as a major health problem rather than merely a problem in appearance. Modern science also explains the problems in hyper function. Only 38.29% of our subjects were familiar with this poem. Kural 479 in Reference No: 087 speak about optimum functioning and judicious use of our available resources. Any resource including Speech and Hearing function should not be abused or misused. Though our survey results showed that 57.44% of our subjects were familiar with this Kural, it was not taken up for relevance study. Kural 480 in Reference No: 088 also speak about optimum functioning. The measure of his wealth will quickly perish, whose liberality weighs more than the measure of his property. Only 17.02 % of our subjects were familiar with this poem. Kural 476 in Reference No: 089 say that we should know the limits of our capacity and go for optimum functioning. While using the breath for voice production; we should not go to the extent of using residual air, because it may result in voice break or hoarseness. Only 27.65% of our subjects were familiar with this poem.

Kural 534 talks about cognition and skill achievements.

Kural 534 in Reference No: 090 say that people with poor memory and also with fear will not achieve greater heights. This view of Thiruvalluvar explains the concept of specific language impairment, the problems faced by children with cognitive delay and stammering. Only 23.40% of our subjects were familiar with this Kural. After seeing the Kural views on speech and language, the following Kurals speaks about sensation and its related issues.

Kurals 575 and 576 speak about vision filled with kindness.

Kural 575 in Reference No: 091 say that a look filled with kindness and passion is considered to be the real beauty of the eyes. Studies by Peter J.Valletutti et al (1985:9), Guy R. Lefrancois (1986:539), Ellenmorris Tiegerman as cited in the book by Deena K. Bernstein (1989: 34, 54, 303) and also the clinical knowledge on autism express the concern for humans and humanism. So, the attachment to humaneness as explained by Valluvar agrees well with the modern views. Only 29.78% of respondents were familiar with this poem. Kural 576 in Reference No: 092 also speak about the quality of eyesight and vision. The trees were given example to people who had good eyes but without kindness.Trees are considered to be much lower down than humans on the evolutionary scale. He expects the presence of excellent qualities of humanism, which are placed above the minimum required standards. Usha Raman (2013: Education plus) on citing the speech of George Saunders says,“ kindness includes the idea of thoughtfulness, as well as empathy, a willingness to go beyond oneself and to help others with public interest”. Only 12.76% of respondents were familiar with this poem.

Kural 27 in reference No: 093 speaks about Valluvar’s clear vision about the importance of and the positive strengths of sensory stimulation in intellectual and language development. This Kural explains that the world is within the knowledge of him, who knows the properties of taste, light, touch, hearing and smell. This agrees well with the thinking of Aristotle as quoted by Margaret A.Winzer (1997: 87). The views of Piaget, Raven and Salzer as quoted by Donna E.Nortan (1985:24), and Sarah Malburg as quoted by Jacqueline Chinappi (2012: web dt. 8-7-2015) also support this view. Recent studies also say that un-stimulated cells may go in for atrophic condition. The gastro intestinal hormonal studies done by Uvnäs-Moberg K,

Widström AM, Marchini G, Winberg J (1987:851-60) and others established that sensory stimulation is of great importance. Stimulating the senses can have a positive effect on learning and also on emotional and social growth of a child. The importance of sensory stimulation is also explained in Gayathri Mantra. The factors like neglect, stress, trauma, and abuse of sense organs or functions have negative effect which can have tragic consequences on brain growth. Studies show that those infants or children, who receive little or no attention and those who are not exposed to positive, purposeful stimuli by their parents, end up with brains that are twenty to thirty percent smaller in size. Only 21.27 % of subjects were familiar with this Kural.

Kurals 1302, 24, 25, 126, 6, 343 and 354 speak about regulating the sensory inputs.

Kural 1302 in Reference No: 094 speak about the limited feigning dislike one can safely express on others and even a little more of that can be dangerous for a good relationship. It is well compared to having more salt in our food. Here the taste sense is given as a fine example for optimum stimulation. Too much or too little sensory stimulation can bring negative results. Only 10.63% of our subjects were familiar with this poem. Kural 24 in Reference No: 095 say about regulating sensory inputs. He emphasizes the importance of giving only positive sensory inputs and to avoid faulty sensory input. Since our unruly senses may drift us away from the target, we have to be careful and we can achieve this only with our wisdom. Only 19.14% of our subjects were familiar with this poem. The Verse 25 in Reference No: 096 explain that people who cannot control their sensory inputs will ultimately face the downfall like Lord Indra. So, to avoid such mistakes, we have to process only the selected positive sensory inputs. It indicates that even the heavenly bodies can be punished, when the norms are violated. Only 21.27% of our subjects were familiar with this

poem. Thrukkural 126 in reference No: 097 says that, just like the tortoise, those who live with self control and restrain from the tempting pleasures will find a safe shelter with a good protection and happiness in all their births. In similar lines, Tamil saint Thayumanavar (1980:99) in his song in chapter twelve also says about controlling the senses. Such people will live long with permanent happiness. Our survey results showed that 51.06% of our subjects were familiar with this Kural. Regarding the relevance judgment 70.53% of people felt it relevant to present day happy life. (29.46 % felt strongly relevant, 41.07% felt relevant. 6.25% felt not relevant 3.57% felt strongly not relevant.19.64% were undecided.)

Kural 6 in Reference No: 098 says that people who avoid getting the bad sensory inputs from all the possible avenues will lead a God's way of righteous life and will be blessed with long and permanent happiness. Only 36.17% of our subjects were familiar with this poem. Kural 343 in Reference No: 099 also speak about regulating sensory inputs. Only when we completely lose interest in material wealth, we can be considered as winners. Only 19.14% of our subjects were familiar with this poem. Kural 354 in Reference No: 100 explain about the importance of cognition and knowledge of past experience in regulating our sensory inputs and to develop critical thinking, concept formation, and meaningful activities. Wisdom will help to process only the selected sensory inputs which in turn will help to get into the acceptable correct track. Modern studies done by Sugarman as quoted in the book by Deena K.Bernstein (1989:62), Helen Keller as reported in the restored edition by James Berger (2003:48), and Asha Yathiraj & Kavitha E.Mascarenhas (2004:5) agree with the thinking of Thiruvalluvar.Valluvar says that even those people with very good sensory inputs will not benefit from them, if they are not able to utilize them with

good background knowledge and critical thinking. Only 6.38 % of our subjects were familiar with this Thirukkural.

Kural 416, 418 and 1199 talk about selective listening.

Kural 416 in Reference No: 101 speak about selective listening of accepted good items. Even if it is a minor point, one should carefully listen to those ideas with full interest and assimilate them to produce great results. The more we listen to good things and words of wisdom; the more we become noble, dignified, and honored. A careful listening to the exposition of difficult and fine points of others can help us to sharpen our ideas. The processing of positive sensory stimulus inputs can help a person to be perfect and achieve healthy life with a good name and respectable fame. Reports by Marilyn Segal (1988:140) and Aasan G.V.K (2008:49) also stress the need of such training. When an individual listens to noble words and is influenced by them; his behaviors, manners, conduct, character, and deeds tend to be good. Our results showed that 57.44% of subjects were familiar with this Kural. Regarding the relevance judgment 91.07% of people felt it relevant to our present day healthy life. (47.32% felt strongly relevant, 43.75% felt relevant. 1.79 % felt not relevant, 0.89 % felt strongly not relevant, and 6.25 % were undecided.)

Kural 418 in Reference No: 102 explain about selective listening. Those ears which are not well stimulated by the good moral instructions are practically considered deaf (functionally deficient). Hearing the thought provoking good values alone accounts for effective hearing. Many of the present day conflicts at home, or community, or national level, or international arena can well be considered or attributed to the lack of getting moral instructions. Only 38.29% of our subjects were familiar with this poem. Kural 1199 in Reference No: 103 tell us the importance of

hearing nice things about loved ones even in an adverse and failed relationship. Even if a lady knows that her lover is going to deceive and fail to shower love on her, listening to a praiseworthy word of him will bring joy to her. Selective listening of positive thought stimulus brings joy and happiness. Even in such difficult times, positive listening can give good satisfaction and solace. 14.89% of subjects were familiar with this Kural.

Kural 417 and 1228 explained the effects of faulty Sensory inputs.

Kural 417 in Reference No: 104 explain that scholars, who have profoundly studied and diligently listened to instructions, will not speak foolishly even if they have imperfectly understood a topic by wrong perception. This explains that a good listening will help a person from not making a foolish statement. Only 12.76% of our subjects were familiar with this poem. Kural 1228 in Reference No: 105 talks about the requirement of a satisfactory and conducive environment to activate, materialize, and positively achieve all the genuine input stimulations. A positive mindset and a thorough preparedness will decide the success of stimulus action. But in an unfavorable environmental situation even a sweet tune from a flute might sound horrible, for it is the mind which really perceives and not the sensory organs alone. Roberta Chapey (1986 :251-255) says that language will vary with each context and the setting of a conversation includes place, surroundings, time of day, and the presence or absence of persons who are not participating in the conversation etc. Only 12.76% of our subjects were familiar with this Kural.

Kurals 1261 and 9 talk about Sensory deprivation.

Kural 1261 in Reference No: 106 relates to the status of a lady who has been unsatisfactorily waiting for a long time to meet her lover. It says that sensory process

may fade or diminish, if it is not constantly or periodically stimulated until its stabilization. Prolonged absence of target stimulus can have negative effects and results in fatigue or failure to stabilize an activity. So, stimulus presentation at least in periodical intervals is necessary to continue the 'on effect' and to get the stabilization of desired response activity. Recent scientific studies also talk about this. Ronald L. Schow et al (1980: 237) say that if the aural rehabilitation does not make provisions for amplification and effective language stimulation during the critical period, the child's language development will be severely delayed or will not develop naturally. On the other hand, he quotes the studies of Downs and others which have shown positive effects with early amplification on the language acquisition of hearing impaired children. Only 8.51% of our subjects were familiar with this poem. Kural 9 in Reference No: 107 talks about sensory losses. It says that a person, who does not worship God, is as useless as a sense organ without the power of sensation. Studies by Mittal S.R.et al (2005:7) quotes that senses are the gateway to the knowledge and blindness limits perception, cognition, and also language development. He reports that blind children generally lag behind their seeing counterparts by two years. Arun Banik et al (2005:34) quote that the effects of deafness leads to auditory deprivation and poor communication. The book by Jack Katz (1985:671) quotes Bennet et al and Rosenweig et al to say that sensory restrictions or sensory deprivations can have a profound influence on behavioral, chemical, and structural development of an individual. Our senses are paramount in our brain's ability to regulate internal status. Only 31.91% of our subjects were familiar with this poem. Kural 1101 in Reference No: 108 say about multi-sensory stimulation. He says that a woman is the only potential source of giving a satisfactory and simultaneous pleasurable stimulation and enjoyment to a man through all sensory modalities. Seeing the beauty, listening to

loving words, hugging the body, smelling the forehead and kissing are the sources of multi-sensory stimulation. Survey results show that only 14.89% of our subjects were familiar with this Kural.

Kural 703, 706 and 1275 deal with Signal detection by intuition.

Kural 703 in Reference No: 109 say that at any cost, the king should correctly identify the right persons with precise intuitive capacity and utilize their good services for the better development of the nation. Avvaiyaar in 'Kondraiventhan' also speaks of the same concept by saying 'ஏவா மக்கள் மூவா மருந்து'. It reveals that children with intuitive capacity are an asset to the family. Only 19.14% of our subjects were familiar with this poem. Kural 706 in Reference No: 110 also indicate that 'face is the index of mind'. Since face can clearly indicate the uppermost feelings and thoughts flowing in a person, a keen observation of it can give good clue to understand one's personality. Though our survey results showed that 55.31% of our subjects were familiar with this Kural, it was not taken up for relevance study. Kural 1275 in Reference No: 111 speak about the cunning departure of the lover, who left with the secret tactic of tightly fitted bangles. The non-verbal signals provided by the lover can act as medicine to alleviate his deep sorrows. Mutual understanding of non verbal signals can help in expressing their ideas and sometimes it can even be better than verbal expression. Only 8.51% of our subjects were familiar with this Kural.

Kurals 389, 151, 159 and 160 tells us about the tolerance to bitter sensory inputs.

Kural 389 in Reference No: 112 say that the whole world will dwell under the umbrella of the king, who can bear the words that embitter the ears. Even in conditions where the feelings and sentiments might be hurt, a king should learn to

tolerate harsh, strong, unpleasant, disturbing, and critical comments. In such conditions, citizens will definitely feel secured and live happily for a long time. Only 17.02% of our subjects were familiar with this poem. Kural 151 in Reference No: 113 also express this good virtue of tolerance for harsh comments. He says that as the earth bears up those who dig it, we have to bear with those who revile, insult and do wrong things to us. It is indicated that forgiving becomes a good attitude and a desirable virtue. Though our survey results showed that 78.72% of our subjects were familiar with this Kural, it was not taken up for relevance study. Kural 159 in Reference No: 114 also say that sometimes in our life, we may be forced to hear unwanted, insulting rude words from crooked, insolent people which can trigger anger in us. Those who tolerate and show good forbearance even in the face of such insults are considered as purer than ascetics and are worth to be admired. Only 21.27% of our subjects were familiar with this poem. Kural 160 in Reference No: 115 say that the people who tolerate with forbearance and endure the un-courteous attacking speech of other ignorant fools are considered one step better than even people who do penance. Only 25.53% of our subjects were familiar with this Kural.

Kurals 411, 412, and 414 record the importance of Hearing.

Kural 411 in Reference No: 116 say that the wealth gained by the listening power is the chief of all wealth. Listening helps in developing good communicative ability, intellectual function and good knowledge. By availing others' advice and the counseling services, the problems of our life can be fully eliminated or get reduced. Aristotle as quoted by Margaret A.Winzer (1997:87) and Jack Katz (1985:622) tells us about the importance of hearing. Our survey results showed that 93.61% of our subjects were familiar with this Kural. Regarding the relevance judgment, 86.59% of people felt it relevant to our present day happy life. (46.42% felt strongly relevant,

40.17% felt relevant. 4.46% felt not relevant 0.89% felt strongly not relevant. 7.14% was undecided and 0.89% failed to score). Kural 412 in Reference No: 117 also speak about the importance of hearing. He says that only when we do not have anything to listen to, we should consider giving a little food to the stomach. In general, hunger and thirst are considered as the primary physiological needs and food and water are the essential requirements for our life. But in this Kural, Valluvar gives preferential importance to the act of listening and secondary importance to palatable foods. Our survey results showed that 80.85% of our subjects were familiar with this Kural. Regarding the relevance judgment, 65.18% of people felt it relevant to our present day healthy life. (22.32% felt strongly relevant, 42.86% felt relevant. 12.5% felt not relevant 5.38% felt strongly not relevant.16.96% were undecided). Kural 414 in Reference No: 118 also tell us about the importance of hearing. It says that even in the absence of any academic learning, a man should carefully listen to the teachings of the learned persons. He gives the wonderful example of a walking stick which will be very useful even in adverse walking conditions and situations. Even among illiterates, hearing plays a crucial role in developing skill excellence. Right from ancient Vedic period, knowledge acquisition has mainly been done by listening. This has been a major division of learning in our system. Our survey results showed that 55.31% of our subjects were familiar with this Kural. Regarding the relevance judgment, 92.85% of people felt it relevant to our present day healthy life. (48.21% felt strongly relevant, 44.64% felt relevant. 2.67 % felt not relevant, 0.89% felt strongly not relevant.3.57% were undecided).

Kural 419 and 420 speak about the need of hearing for acquiring speech and making life meaningful.

Kural 419 in Reference No: 119 say that persons with defective hearing will not develop good speech. Modern science also says that a child's speech and language development will depend on his hearing capacity. Any loss in hearing will result in delayed speech and language development and interfere with the educational process. His intricate knowledge to link speech and hearing skills is a great scientific truth which is very relevant even today. The book by Hallowell Davis and Richard Silverman S. (1970: 360) quote Raymond Carhart who says that speech is normally controlled by the ear. Jack Katz (1985:622) quotes Fry and stated that the motivation for language acquisition is ordinarily generated through the auditory channel. As pointed out by Jack Katz (1985: 622,623) many authors have opined that even minimal deafness causes many communication difficulties. Only 29.78% of our subjects were familiar with this poem. Kural 420 in Reference No: 120 explain the need of good hearing and listening to have a meaningful life. In that he asks, "what does it matter whether those men live or die, who can judge the tastes by the mouth and not by the ear? By calling them "மாக்கள் (cattle)", he considers them less privileged and places them at the lower level of evolutionary order. He questions the need for the very existence of such people, because nobody could benefit from them and they were considered a burden to the society in those days. We have a reason to believe him because similar ideas were prevalent in other cultures and civilizations as well. The reports of Lennard J. Davis (1997:188) reveal the problems faced by persons with speech and language disabilities in ancient Rome, Egypt, and Europe. Even now, the disability group has to face many such adverse issues in the society. If it is an evolving and ongoing process even in this century, we cannot expect any better position or condition during valluvar's period. This idea of valluvar was told in the situation prevalent during his period of time. Kulandaiswamy V.C. (2002: XVI) in

his book on Thirukkural says, "most of the modern concepts and practices, considered simple and self evident today, did not exist at that time of Valluvar. Many concepts like democracy, socialism, welfare state, social justice, equality and dignity of human individual were unknown during the time of Valluvar". But now, the latest developments in science and technology have brought many advancements and sophistication in disability rehabilitation. Invention of appliances including cochlear implants, refined teaching methods including speech therapy, enhanced educational methods like integerated teaching have supplemented to overcome their communication problems. Sadhana Relekar et al (1999) in her book quoted Alexander Graham Bell as saying, "One of the greatest achievements in the world is that of a child born deaf learns to talk. Teaching a child with hearing impairment to talk is indeed a great achievement, and helping him to speak with ease and intelligibility represents one of the greatest challenges facing educators of the hearing impaired today". Thiruvalluvar lived in a period and in the society whose problems were different from that of now. Kulandaiswamy V.C. (2002: XVI) states, "Science and Technology, in the form in which we know of it today, is essentially a post Galileo phenomenon and did not exist during Valluvar's period". The views of Valluvar go well with the views of other contemporary cultures and civilizations during that period.

But still, Kulandaiswamy V.C. (2002: XVIII, XIX, XX) has strongly argued for Kural's validity for present day life situation. He says, "We can accept or reject a part or whole of its idea. As any book can be subjected to an objective enquiry, it is valid for Kural poems also. It is really healthy for an ideology or a concept or a theory to be subjected to a test every now and then for validity and relevance. Nothing that is living should claim immunity from enquiry into its applicability. Such preparedness

will add to its strength. It is possible, that some couplets are free from the impact of contemporary influences and are relevant irrespective of time and place. But it is not easy to prepare a whole text of 1330 couplets on so temporal a subject as 'The Art of living' and present the contents in a manner that they still hold good, in spite of the immense changes that have taken place. We hail those as sages or saints who almost intuitively show an insight into the nature of human society, a perception of its progress, an understanding of the permanent and the ephemeral: but how far can they anticipate the future? Valluvar was a product of the early stages of agricultural civilization which flourished, progressed and developed for centuries. The Science and Technology began and brought in its wake momentous changes. The human society has seen upheavals and revolutions, the all pervasive phenomenons. Starting from the middle of the 20th century, we have seen another breakthrough and have entered the era of knowledge. The developments in Science and Technology, life sciences etc have produced numerous new tools. Knowledge has emerged as a new resource that can be generated and augmented for the absence of all other resources. Now we have civilized democracy instead of monarchy. Now, universalization of education is the objective of the world. Presently, the human rights are considered as privilege and sacred. Because of all these changes, even the old questions need new answers". So his view in this poem may have to be reconsidered for its validity. Only 38.29% of our subjects were familiar with this Kural.

Kural 415, 65 and 413 speak about Hearing and its importance.

Kural 415 in Reference No: 121 give the importance and usefulness of listening to the intellectual words of wise and disciplined scholars. Even the well educated and skilled persons are advised to give due respect to others' views and ideas. Even in the absence of structured learning situations, where reading books are

involved; one's management skill can still be made better by just listening to scholarly ideas. Getting such ideas through counseling and utilizing those suggestions in their life situations will help to over come difficulties. Only 27.65% of our subjects were familiar with this Kural.

Kural 65 in Reference No: 122 says that as touch of the baby gives happiness to the mother and other family members; hearing the baby's voice, otherwise called as Babbling gives a unique pleasure to our ears and a great experience to our mind. Study by Marilyn Segal (1988:140) explains the importance of touch sense. Only 31.91% of our subjects were familiar with this poem. Kural 413 in Reference No: 123 say that those who enjoy instructions which are food to the ears are equal to Gods and they will be free from sufferings. By speaking high of this listening skill, he indirectly gives importance to preserve the skill of hearing / listening. He says that if a person has good listening skill, it should be considered a pride and blessing. Hence it has to be safely protected. We should care to protect our hearing from possible damages induced and caused by noise, drugs, viral and preventable diseases, mechanical manipulation of ears, accidents etc. Only 27.65% of our subjects were familiar with this poem.

Kural 504 speaks about the use of ability to combat disability (weakness).

Kural 504 in Reference No: 124 talks about weighing ones strength of good qualities and not worrying about his defects. Ignoring normal variations particularly in speech and language is a diagnostic criterion. By knowing both the good and undesirable qualities of a person, the king can make a judgment of a person by weighing his merits. Even the best of brains may exhibit some ignorance. The proverb "Good Homer sometimes nods" stands proof to this. The slogan of Kovai

Rehabilitation and Information Services for the Handicapped (KRISH) “Use of ability, to combat disability” also indicates well this theme. Since perfect people are not available in this world, a practical prescription is given. Study reports and the clinical knowledge in the field of speech and hearing tell about valuing the merits of individuals. Though our survey showed that 74.46% of our respondents were familiar with this Kural, it was not taken up for relevance study.

Kural 1102 ask us to face the challenges in its reality.

Kural 1102 in Reference No: 125 while telling about love say that the cause of the disease itself is the remedial cure for that. This type of cause and effect is particularly so in the subjects of speech and hearing. In dealing with speech problems instead of avoiding it, we have to speak more to improve our communicative function. In similar lines, use of more and more talking in different situations is the better and main option to improve the language structure and to get a fluent speech. For example, the speech of a stammerer will improve only when he talks more. Even in dealing with other speech problems, constant drill plays an important role. Only 19.14% of subjects were familiar with this Kural.

This study shows that 125 out of the total 1330 poems constituting 9.62 % of the total poems have either direct or indirect reference to the topic of communication science. This also indicates that Thirukkural has a lot of scientific facts about this branch of study. His allocation of two exclusive chapters for Speech and Hearing shows his special interest for these skills. This study proves the hypothesis No: 1.

Hypothesis 2: All these deserving scientific facts given in Thirukkural about these topics have not been brought to limelight for our developmental growth.

The above said evidences have confirmed the abundant scientific information available in Thirukkural about Speech and Hearing science. It is amazing to know the in-depth knowledge which Thiruvalluvar had about this branch of study. He not only talked about the basics of Speech and Hearing, but also about the higher level abstract concepts that are related to communication science. Since all these topics deal with basic activities of our life, they become essential for our developmental growth. The basics of modern Speech and Hearing science are concerned with medical, psychological, linguistic, social and technical aspects. Valluvar had focused his views still further on higher level abstract concepts like moral, ethical and value systems. As these higher level concepts like moral and ethical facts are abstract in nature, not many people ventured to enter this domain. When his teachings are strictly followed in our life, it will help us to develop skills excellence. This makes Valluvar a highly acclaimed scientist of moral and ethical science. Inspite of it's merit, Kural has not been brought to limelight. It is sad to note that inspite of getting 87.19%.of relevance scores, only twenty three poems out of one hundred and twenty four Kurals had the familiarity scores of fifty percent and above. Particularly among the Speech Pathologists and Audiologists group, the 'not familiar' scores were more than the 'familiar' status. No known earlier Thirukkural study on these subjects has been reported and it has not been brought to limelight. Many of these Kural poems and its values have been unexplored or underexplored by modern science. Though a beginning has been made by this research, a careful and higher level exploration of Thirukkural will bring much more information about this branch of science.The second hypothesis is also proved to be true by this study.

Hypothesis 3: All the kurals which are considered to be related to the topics of Speech, Language, Hearing and other Sensory inputs are equally familiar across

the cross section of people spread in ten categories who are directly or indirectly connected with the subject of Speech and Hearing.

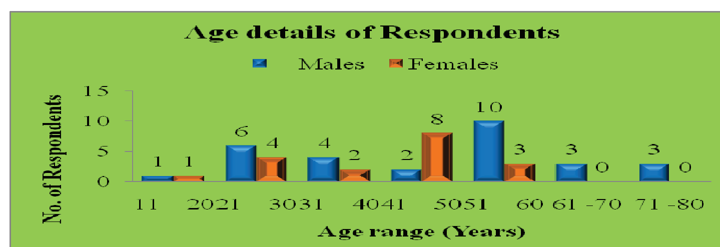
Table: 4. Familiarity Study: Age details of respondents.

Sex / Age range (Yrs)	Males	Females	Total
11 – 20	1	1	**2**
21 – 30	6	4	**10**
31 – 40	4	2	**6**
41 – 50	2	8	**10**
51 – 60	10	3	**13**
61 -70	3	0	**3**
71 -80	3	0	**3**
Total	**29**	**18**	**47**

To test this hypothesis, a survey research on familiarity was undertaken. The details of valuable demographic data of the respondents and familiarity status scores for the chosen Thirukkural poems are given herewith for information.

The respondent population included twenty nine males (61.70%) and eighteen females (38.30%). The age range for the total group was from twenty years to eighty years with a mean of 44.52 years. The age of males ranged from twenty one years to eighty years and the average is 49.18 years. Females' age ranged from twenty years to sixty two years with a mean of 39.87 years. In total, 82.98% of subjects were from the age range of twenty one years to sixty years. The following graph shows the number of male and female respondents in each of the ten year age ranges.

Graph: 1. Familiarity Study: Age details of respondents.



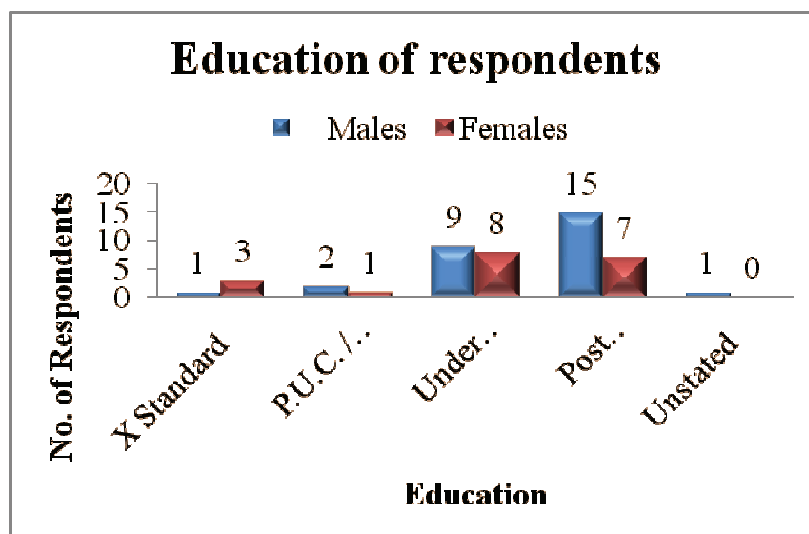
The distribution of respondents showing their educational standards were analyzed and it showed the following results.

Table: 5. Familiarity study: Education of respondents.

Sex / Education.	Males	Females	Total
X Standard	1	3	4
P.U.C. / Plus 2	2	1	3
Under Graduates	9	8	17
Post graduates	15	7	22
Unstated	1	0	1
Total	**28**	**19**	**47**

Though S.S.L.C.was considered as the minimum qualification, 82.98% had college education. No difference was made out between Postgraduate and Doctoral degrees.

Graph: 2. Familiarity study: Education of respondents



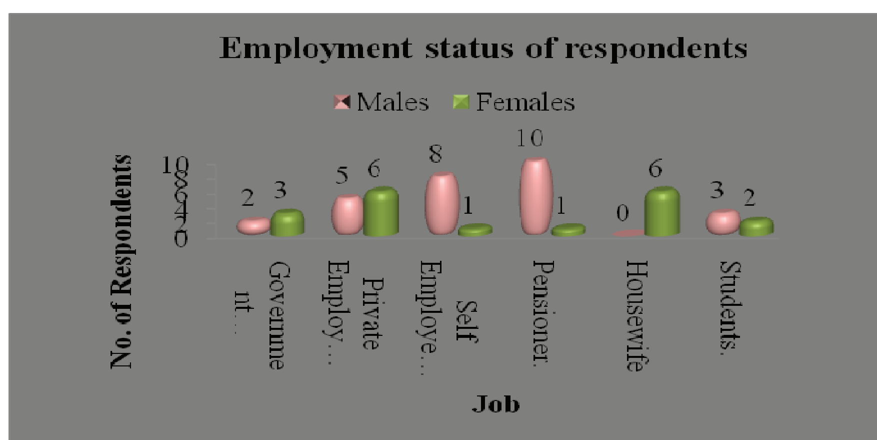
The analysis of respondents' employment status showed the following results.

Table: 6. Familiarity study: Employment status of respondents

Job. \ Sex	Males	Females	Total
Government Employment.	2	3	**5**
Private Employment.	5	6	**11**
Self Employed / Business.	8	1	**9**
Pensioner.	10	1	**11**
Housewife	0	6	**6**
Students.	3	2	**5**
Total	**28**	**19**	**47**

The subjects had a wide range of occupations. Only 10.6% of subjects had government jobs and including pensioners they accounted to 34%. The private job holders, and self employed / business group accounted for 42.55%. It can be seen that 19.15% of the subjects were from self employed, and business groups. Pensioners, Housewives, and students were also included.

Graph: 3. Familiarity study: Employment status of respondents



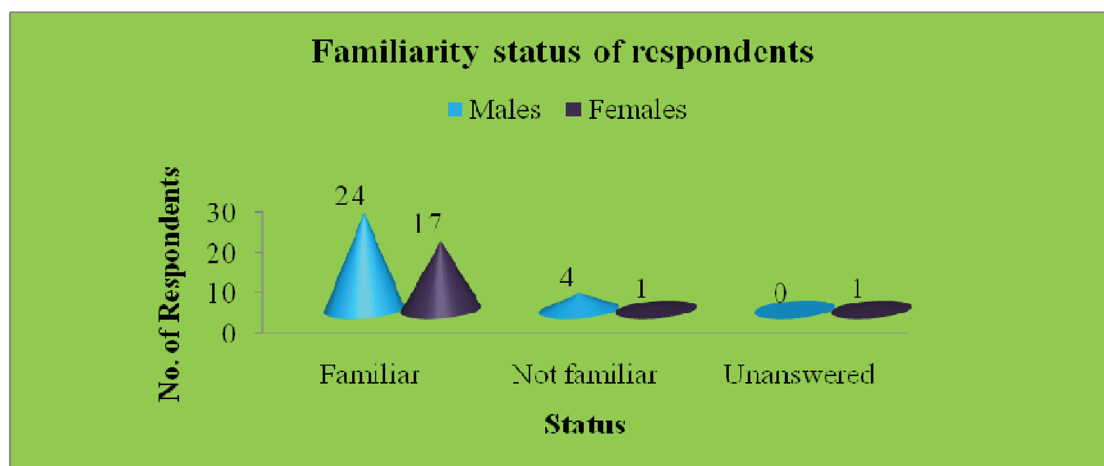
All respondents were from Coimbatore district. Knowledge of Tamil language alone was taken into account and no discrimination was made by region.The personal statement of details of their familiarity for Kural is given herewith.

Table: 7. Familiarity study: familiarity status of respondents

Sex / Status	Males	Females	Total
Familiar.	24	17	**41**
Not familiar.	4	1	**5**
Unanswered.	0	1	**1**
Total	**28**	**19**	**47**

It was personally stated by 87.23% of the respondents that they were familiar with Thirukkural. Only 10.64% of subjects stated that they were not familiar with Thirukkural. This might be due to wrong perception, because all would have studied Kural in their school curriculam. Probably they meant that they were not proficient about the literary aspects of Kural.

Graph: 4. Familiarity study: familiarity status of respondents



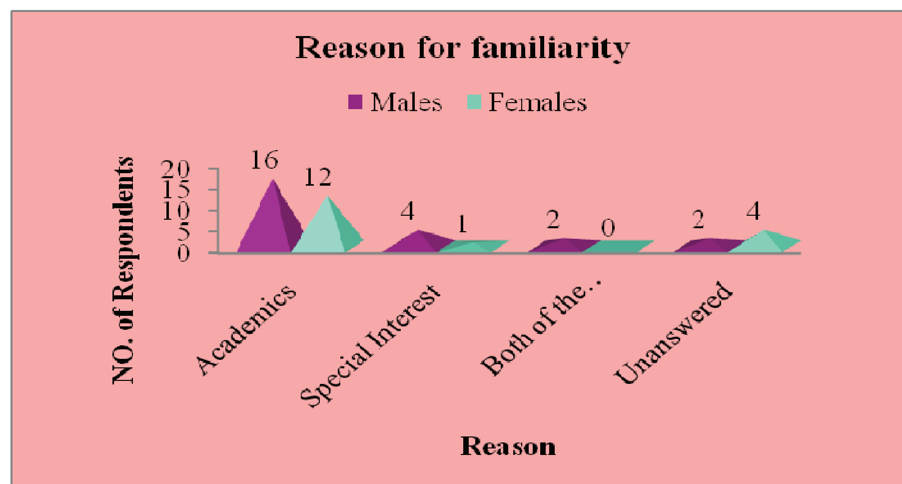
The reason for familiarity of Kural is given herewith.

Table: 8. Familiarity study: Reason for familiarity

Sex / Reason	Males	Females	Total
Academic study.	16	12	**28**
Special Interest.	4	1	**5**
Both of above.	2	0	**2**
Unanswered.	2	4	**6**
Total	**24**	**17**	**41**

Though 68.29% of respondents stated that they learned Kural as part of their curriculam, 12.20% stated that they learnt them out of interest. Another 4.88% of respondents stated that they learned because of both reasons and 14.63% of the subjects did not state the way how they became familiar. This may be due to the vagueness of the question. Close ended questions would have brought better results.

Graph: 5. Familiarity study: Reason for familiarity



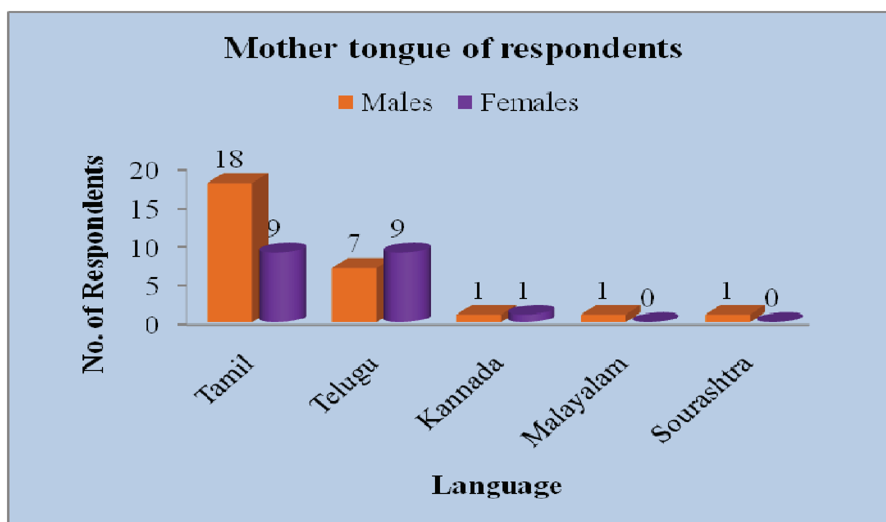
Mother tongue details of respondents are given herewith.

Table: 9. Familiarity study: Mothertongue of respondents

Language \ Sex	Males	Females	Total
Tamil	18	9	**27**
Telugu	7	9	**16**
Kannada	1	1	**2**
Malayalam	1	0	**1**
Sourashtra	1	0	**1**
Total	**28**	**19**	**47**

All the respondents had known Tamil. But only 57.45% had Tamil as their mother-tongue, while 40.43% of them had a Dravidian language and 2.13% had Sourashtra as their mother tongue.

Graph: 6. Familiarity study: Mothertongue of respondents



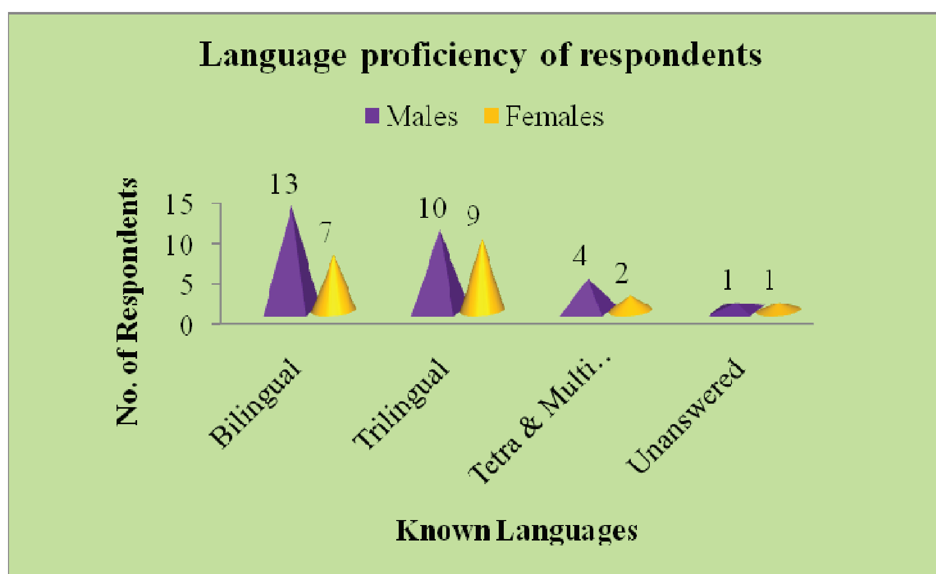
The following table and graph gives the details about the respondents' language proficiency.

Table: 10. Familiarity study: Language proficiency of respondents

Known Languages. \ Sex	Males	Females	Total
Bilingual.	13	7	**20**
Trilingual.	10	9	**19**
Tetra & Multi lingual.	4	2	**6**
Unanswered.	1	1	**2**
Total.	**28**	**19**	**47**

All the respondents knew more than one language. Among them 42.55% responders were bilingual, 40.43% were trilingual, 12.77% were exposed to four or more languages, and 4.26% of the respondents did not answer this question.

Graph: 7. Familiarity study: Language proficiency of respondents



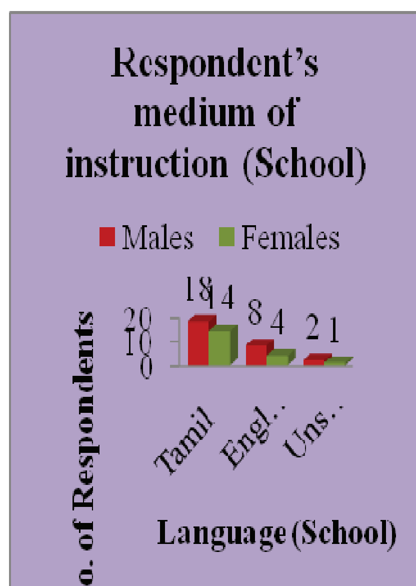
The medium of instruction of respondents' academic study are given herewith.

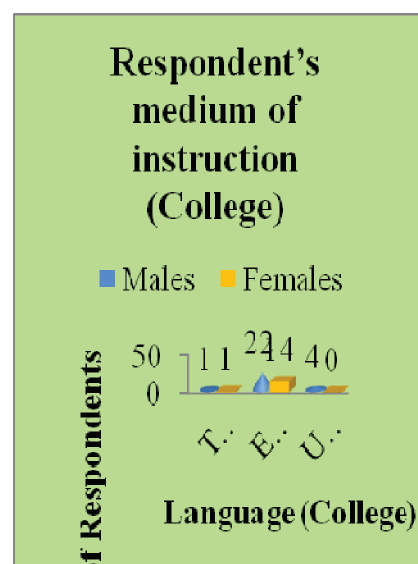
Table: 11. Familiarity study: Respondents' medium of academic instruction

Sex / Language.	In School			In College.		
	Males	**Females**	**Total**	**Males**	**Females**	**Total**
Tamil	18	14	32	1	1	**2**
English	8	4	12	22	14	**36**
Unspecified.	2	1	3	4	0	**4**
Total	**28**	**19**	**47**	**27**	**15**	**42**

At school level, 68.09% of respondents had education in Tamil medium and 25.53% in English and 6.38 % did not specify about it. At college level only 4.76% respondents had Tamil medium instruction, whereas 85.71% had English and 9.52% did not specify about it. This indicates that in the previous generation, majority of the public had their basic education in Tamil medium and preferred or forced to have English in higher studies. Probably there was no choice for selection of language other than English as the medium of instruction for higher education.

Graph: 8 Familiarity study: Respondent's medium of academic instruction





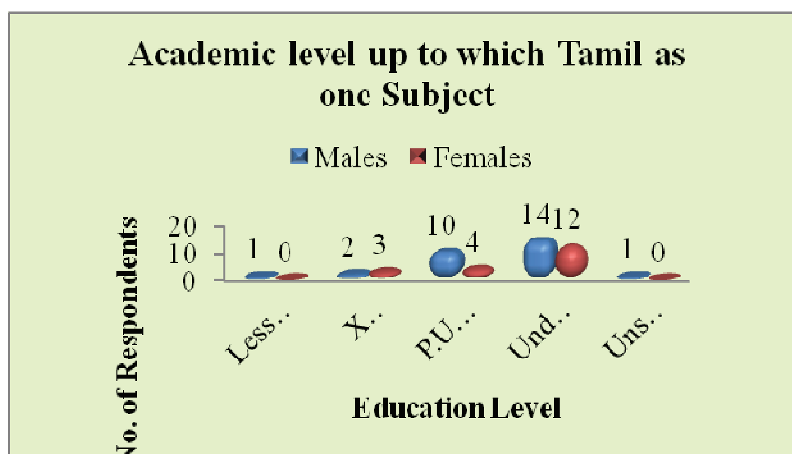
The following table and graph gives the details of respondents' study of Tamil as one language.

Table: 12. Familiarity study: Academic level up to which Tamil as one Subject.

Sex / Education level	Males	Females	Total
Less than X Standard	1	0	**1**
X Standard.	2	3	**5**
P.U.C. / +2	10	4	**14**
Undergraduation+Post graduation.	14	12	**26**
Unspecified	1	0	**1**
Total	**28**	**19**	**47**

It could be inferred from the table that 12.77% of the respondents had Tamil as 2nd language up to X standard, 29.79% had Tamil as second language up to +2, and 55.32% of respondents had Tamil up to college level. 2.13% of respondents did not specify about their status.

Graph: 9. Familiarity study: Academic level up to which Tamil as one Subject.



In the second part of familiarity study, the familiarity scores were analyzed and tabulated. The details of familiarity score for each category is given herewith.

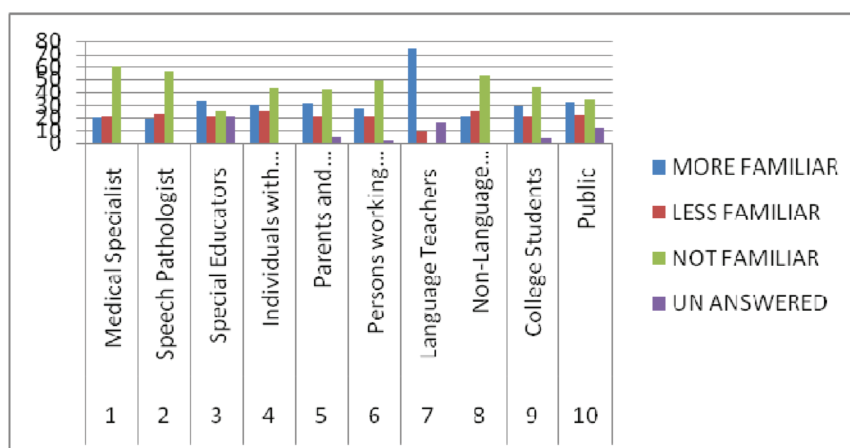
Table: 13. Familiarity study: The familiarity score details for each category.

Sl. No.	Category.	No. of Subjects	More Familiar %	Less Familiar %	Not Familiar %	Un – answered %
1	Medical Specialists.	4	19.55	20.36	60.08	0
2	Speech Pathologists	5	18.7	23.87	57.09	0.32
3	Special Educators.	4	33.26	20.36	25.80	20.56
4	Teachers of Language Subjects.	4	73.99	9.07	0.61	16.33.
5	Teachers of Non-Language Subjects.	4	20.77	25.40	53.43	0.40
6	College Students.	5	29.20.	22.10.	44.19.	4.52.
7	Parent& Family member of Persons with Disabilities.	5	31.45.	20.80.	42.88.	4.84.
8	Individuals with Disabilities.	5	30.16.	25.80.	44.03.	0
9	Persons working for people with Disabilities	4	27.42.	21.57.	48.99.	2.02.
10.	General Public.	7	31.57.	22.24.	34.10.	12.10.
	Total.	**47**	**31.61.**	**21.15.**	**41.12.**	**6.12.**

Only 31.61% of kurals were more familiar and 21.15% were less familiar and both together as positive scores accounted to 52.76% of familiarity. Among those selected 41.12% of kurals were not familiar.This shows that only a little more than the majority of Kurals were familiar to the population studied. Unfortunately, 6.12% of kurals were not answered. Only Teachers of language subjects with a positive score of 83.06% (73.99% of more familiar and 9.07% of less familiar) had the highest Kural familiarity scores. Among Special Educators, Teachers of language subjects, and College students; the percentage of familiarity exceeded the percentage of non familiarity of Kurals. Academic teaching of Thirukkural in their day to day work may

be the reason for their better level of familiarity. Among Teachers of language subjects, the percentage of the less familiar is lower with a score of 9.07%; and in all other categories, it is almost similar and ranged from 20.36% to 25.80%. Medical Specialists scored the minimum level of familiarity with 39.91% (19.55% of more familiar and 20.36% of less familiar). This was closely followed by Speech Pathologists and Audiologists who scored the familiarity level of 42.58% (18.7% of more familiar and 23.87% of less familiar). In all other categories except Language teachers, the less familiar score was almost similar. The score 18.7% of Speech Pathologists and Audiologists was the lowest for more familiar condition. In spite of the fact that Speech and Hearing topics have been allotted two exclusive chapters in Thirukkural, the percentage of more familiar rating score was the lowest among this group. It may be due to the fact that these kurals do not deal with the pathological conditions and so did not receive their attention. A relatively high score of unanswered column about the familiarity status was noticed among Special Educators (20.56%) and Teachers of language subjects (16.33%). Medical Specialists and the Individuals with disabilities answered all the questions without any omission.

Graph: 10. Familiarity study: The familiarity score details for each category.



The familiarity scores for each Kural are given herewith.

Table: 14. Familiaritystudy: The percentage of familiarity for each Kural.

Sl. No:	Kural No:	Familiarity score.(% of subjects familiar with this Kural)
1.	715	4.25
2.	335	6.38
3.	646	6.38
4.	354	6.38
5.	714	8.51
6.	568	8.51
7.	514	8.51
8.	1271	8.51
9.	1253	8.51
10.	683	8.51
11.	1261	8.51
12.	1275	8.51
13.	1274	8.51
14.	567	10.63
15.	119	10.63
16.	701	10.63
17.	1312	10.63
18.	564	10.63
19.	1302	10.63
20.	387	12.76
21.	649	12.76
22.	191	12.76
23.	650	12.76
24.	182	12.76
25.	1317	12.76
26.	1318	12.76
27.	576	12.76
28.	1228	12.76
29.	417	12.76
30.	525	14.89
31.	959	14.89
32.	199	14.89
33.	187	14.89
34.	1203	14.89
35.	271	14.89
36.	1199	14.89
37.	1101	14.89
38.	712	17.02
39.	128	17.02
40.	682	17.02
41.	480.	17.02

42.	389	17.02
43.	872	19.14
44.	195	19.14
45.	185	19.14
46.	1102	19.14
47.	24	19.14
48.	343	19.14
49.	703	19.14
50.	1198	21.27
51.	97	21.27
52.	953	21.27
53.	721	21.27
54.	193	21.27
55.	713	21.27
56.	648	21.27
57.	27	21.27
58.	25	21.27
59.	159	21.27
60.	98	23.40
61.	826	23.40
62.	192	23.40
63.	824	23.40
64.	635	23.40
65.	534	23.40
66.	1121	25.53
67.	198	25.53
68.	694	25.53
69.	386	25.53
70.	1057	25.53
71.	183	25.53
72.	696	25.53
73.	160	25.53
74.	99	27.65
75.	476	27.65
76.	415	27.65
77.	413	27.65
78.	641	29.78
79.	575	29.78
80.	419	29.78
81.	194	31.91
82.	196	31.91
83.	184	31.91
84.	139	31.91
85.	642	31.91
86.	1040	31.91
87.	9	31.91
88.	65	31.91
89.	181	34.04

90.	644	36.17
91.	6	36.17
92.	475	38.29
93.	418	38.29
94.	420	38.29
95.	783	40.42
96.	490	42.55
97.	197	42.55
98.	647	42.55
99.	643	42.55
100.	1100	42.55
101.	711	46.80
102.	95	51.06
103.	28	51.06
104.	126	51.06
105.	35	55.31
106.	706	55.31
107.	414	55.31
108.	479	57.44
109.	416	57.44
110.	504	74.46.
111	66	76.59
112	664	76.59
113	621	76.59
114	292	78.72
115	151	78.72
116	412	80.85
117	392	82.97
118	200	85.10
119	291	89.36
120	411	93.61
121	129	95.74
122	1	95.74
123	100	100
124	127	100

The rating scores of familiarity for each Kural ranged from 4.25% to 100%. These results showed that all the Kurals were not equally familiar across the cross section of people. So, this survey has failed to prove the stated hypothesis No: 3.

Hypothesis 4: All the applicable familiar kurals on the said topics, which enjoyed 50 % and above familiarity scores are equally relevant to today's healthy life.

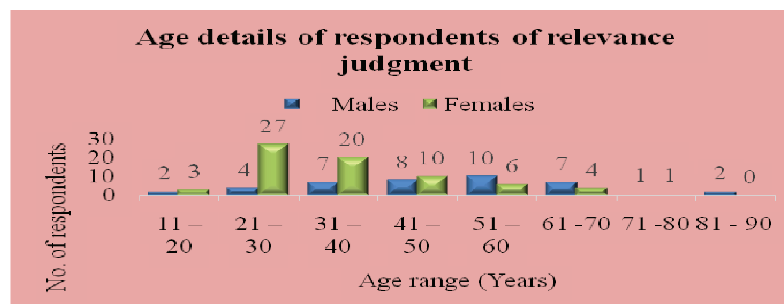
From twenty three Kurals which enjoyed fifty percent and above of familiarity, only sixteen applicable Kurals which had more direct expression on Speech, Language and other Sensory inputs were shortlisted for the next survey on relevance. The analysis of demographic details is given here and the age details are:

Table: 15. Relevance study: Age details of respondents

Sex / (Yrs) / Age range	Males	Females	Total
11 – 20	2	3	**5**
21 – 30 "	4	27	**31**
31 – 40 "	7	20	**27**
41 – 50 "	8	10	**18**
51 – 60 "	10	6	**16**
61 - 70 "	7	4	**11**
71 - 80 "	1	1	**2**
81 - 90 "	2	0	**2**
Total	**41**	**71**	**112**

The subjects included fortyone males (36.61%) and seventy one females (63.39%). The age range of subjects was from eighteen years to eighty three years with a mean value of 42.4 years. Males' age range was the same as above and the average age was 44.7 years. Females' age ranged from nineteen to seventy seven years with a mean of 40.1 years. It can be seen that 82.14% of the subjects were in the age range of twenty one years to sixty years.

Graph: 11. Relevance study: Age details of respondents.



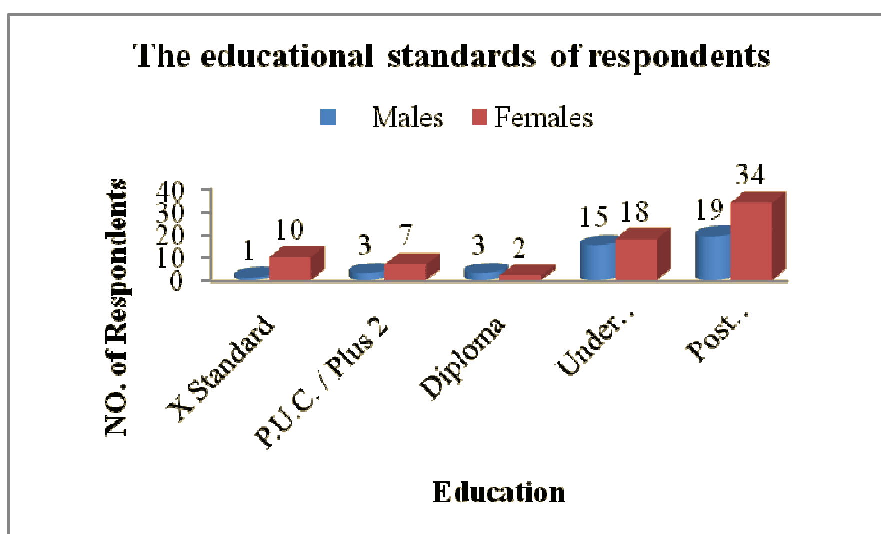
The following is the details of the respondents' Educational qualification.

Table: 16. Relevance study: Educational standards of respondents

Sex / Education.	Males	Females	Total
X Standard	1	10	**11**
P.U.C. / Plus 2	3	7	**10**
Diploma	3	2	**5**
Under Graduation	15	18	**33**
Post Graduation	19	34	**53**
Total	**41**	**71**	**112**

Though SSLC was considered as the minimum qualification, 81.25 % of the respondents had college education. No difference was made out between Postgraduate and Doctoral degrees.

Graph: 12. Relevance study: Educational standards of respondents.



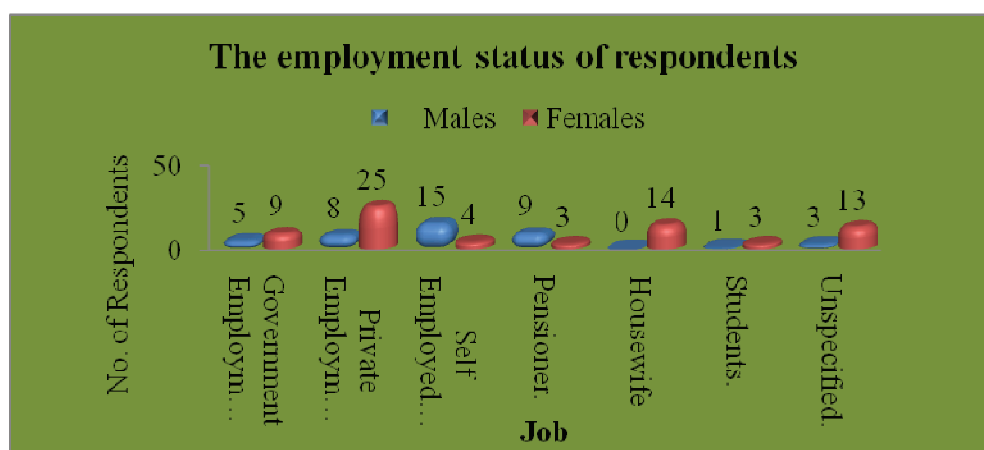
The employment details of the respondents are given below.

Table: 17. Relevance study: The employment status of respondents

Job. \ Sex	Males	Females	Total
Government Employment.	5	9	**14.**
Private Employment.	8	25	**33.**
Self-employed: Business/Agriculture etc	15	4	**19.**
Pensioner.	9	3	**12.**
Housewife	0	14	**14.**
Students.	1	3	**4.**
Unspecified.	3	13	**16.**
Total	**41**	**71**	**112.**

The subjects had government or private jobs, or were self employed (business, agriculture etc). Of them 12.5% had government jobs and pensioners accounted for 10.71%. Private jobs were held by 29.46% and 16.97 % included the self employed, businessmen and agriculturists. The private and self employed accounted for 46.43%. Pensioners, housewives, and students were also included in the study.

Graph: 13. Relevance study: The employment status of respondents



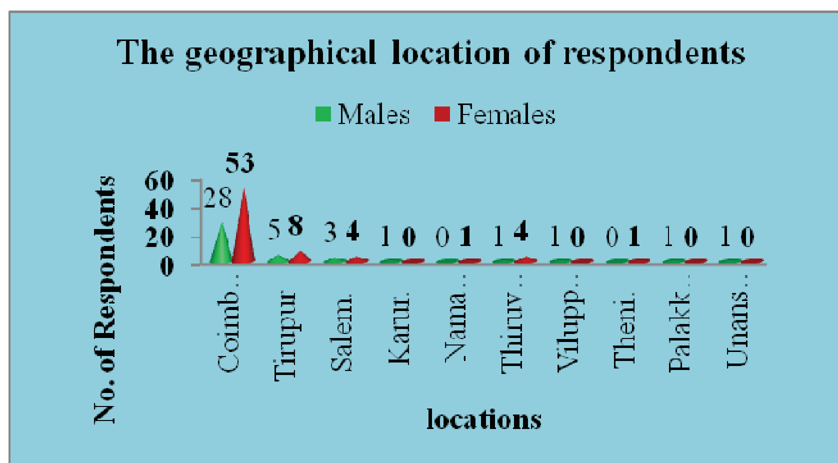
The following is the details of respondent's geographical location.

Table: 18. Relevance study: Geographical location of respondents

Location \ Sex	Males	Females	Total
Coimbatore	28	53	**81**
Tirupur	5	8	**13**
Salem.	3	4	**7**
Karur.	1	0	**1**
Namakkal.	0	1	**1**
Thiruvallur.	1	4	**5**
Viluppuram.	1	0	**1**
Theni.	0	1	**1**
Palakkad.	1	0	**1**
Unanswered.	1	0	**1**
Total	**41**	**71**	**112**

Understandably, as the researcher belongs to Coimbatore, 72.32% of respondents were from Coimbatore district. But samples were also collected from other districts of Tamil Nadu, and neighboring Palakkad district. Knowledge of Tamil alone was taken into account and no discrimination was made by region.

Graph: 14. Relevance study: Geographical location of respondents



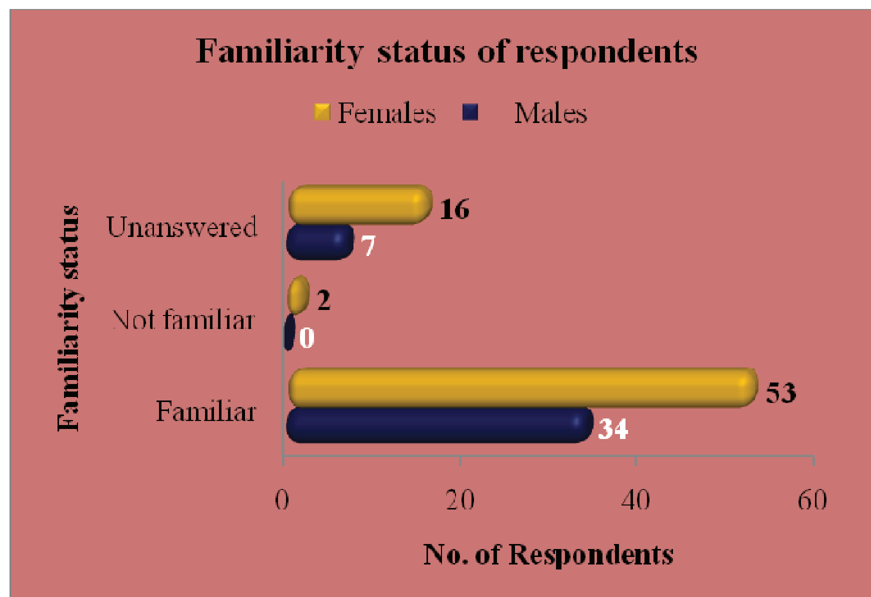
The following is the details of respondent's familiarity status.

Table: 19. Relevance study: Familiarity status of respondents

Sex / Status	Males	Females	Total
Familiar.	34	53	**87**
Not familiar.	0	2	**2**
Unanswered.	7	16	**23**
Total	**41**	**71**	**112**

Among all, 77.67% of respondents said that they were familiar with Kural. Only 1.79% of the subjects stated that they were not familiar with it probably meaning that they were not proficient in it.

Graph: 15. Relevance study: Familiarity status of respondents



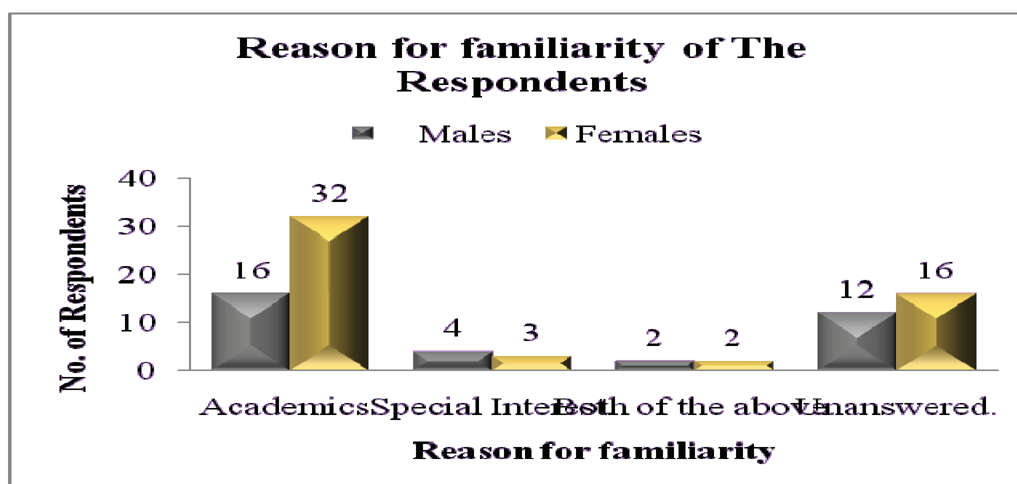
The details of reason for familiarity of Kurals are given below.

Table: 20. Relevance study: Reason for familiarity of Kural

Sex / Reason	Males	Females	Total
Academic study.	16	32	**48**
Special Interest.	4	3	**7**
Both of the above.	2	2	**4**
Unanswered.	12	16	**28**
Total	**34**	**53**	**87**

It was stated by 55.17% of the respondents that they learned Kural as a part of their curriculam and 8.05% stated to have learnt them out of interest. Another 4.6% of the respondents said to have learnt Kural both in the curriculam and out of interest. But 32.18% of respondents did not state how they became familiar. This might be due to vagueness of questions. Specific questions could have elicited better results.

Graph: 16. Relevance study: Reason for familiarity of Kural



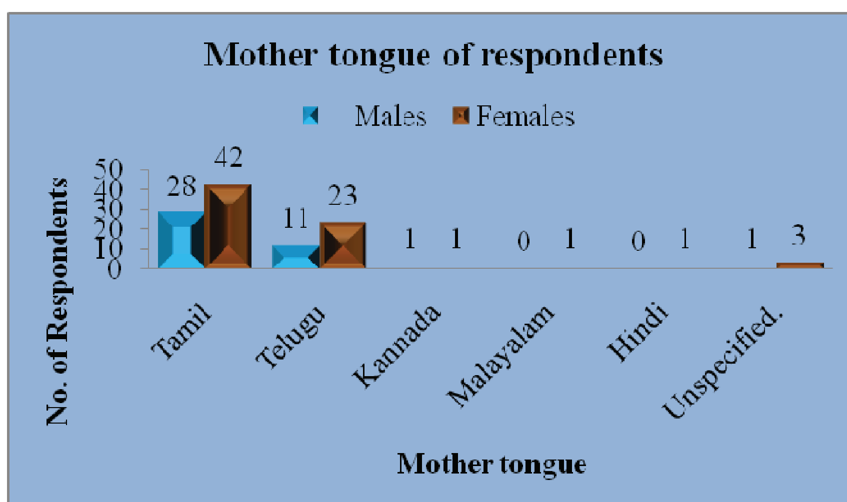
The mother-tongue details of respondents' are given herewith.

Table: 21. Relevance study: Mother-tongue of respondents

Sex / Language	Males	Females	Total
Tamil	28	42	**70**
Telugu	11	23	**34**
Kannada	1	1	**2**
Malayalam	0	1	**1**
Hindi	0	1	**1**
Unspecified.	1	3	4
Total	**41**	**71**	**112**

Though all knew Tamil, only 62.5% had Tamil as their mother-tongue. Other Dravidian languages were the mother-tongues for 33.03% of subjects while 0.89% of subjects had Hindi as mother-tongue. Strangely, 3.57% of respondents did not specify their mother tongue.

Graph: 17. Relevance study: Mother tongue of respondents



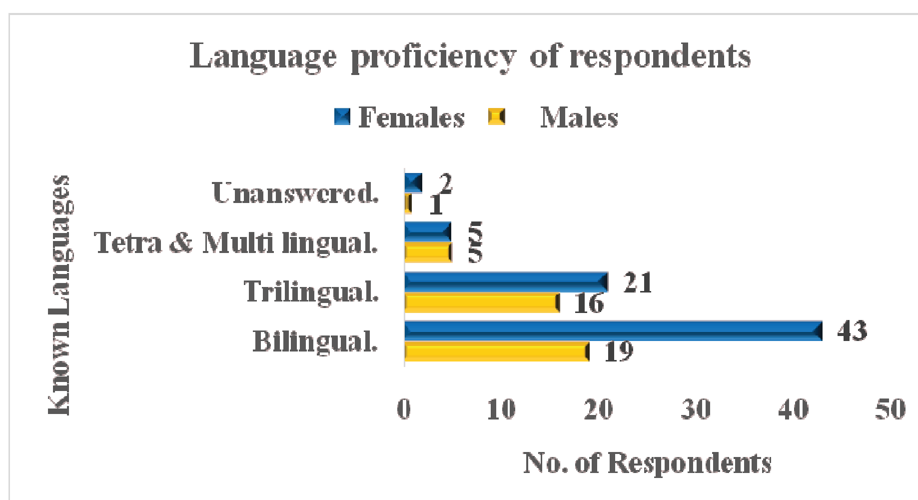
The following table and the graph give the language proficiency of respondents.

Table: 22. Relevance study: Language proficiency of respondents

Sex / Known Languages.	Males	Females	Total
Bilingual.	19	43	**62**
Trilingual.	16	21	**37**
Tetra & Multi lingual.	5	5	**10**
Unanswered.	1	2	**3**
Total.	**41**	**71**	**112**

All the respondents knew more than one language. Among them, 55.36% subjects were bilingual, 33.03% were trilingual, 8.92% were exposed to four or more languages and 2.69% of the respondents did not answer this question.

Graph: 18. Relevance study: Language proficiency of respondents



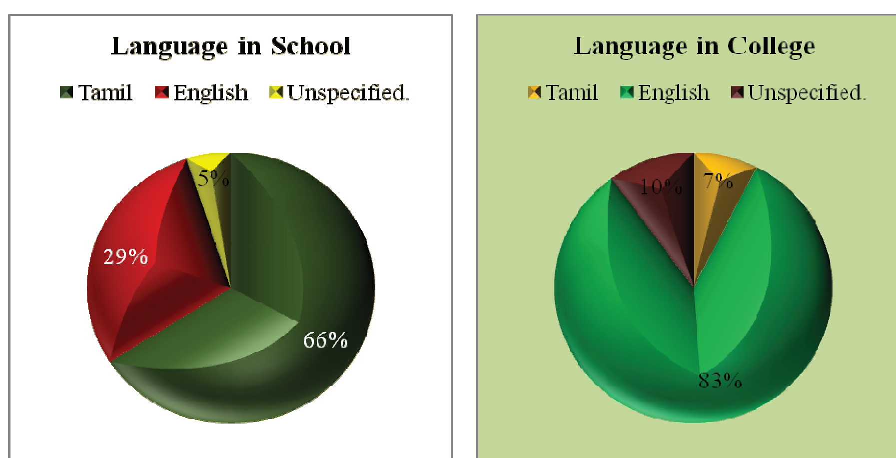
The details of respondents' medium of instruction are given herewith.

Table23. Relevance study: The respondents'medium of instruction.

	In School			In College.		
Sex / Language.	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
Tamil	27	45	72	3	3	**6**
English	12	21	33	33	45	**78**
Unspecified.	2	5	7	4	13	**17**
Total	**41**	**71**	**112**	**40**	**61**	**101**

In schools, 64.28 % of subjects had their education in Tamil medium and 29.46% in English. At college, only 5.35% of the respondents had Tamil as their medium of instruction, whereas 69.64% had English as their medium of study. It indicates that majority of the respondents had their basic education in Tamil medium and then preferred or forced to have English as the medium during higher education. Probably there was no choice of language other than English for them to select as the medium of instruction for higher studies.

Graph: 19. Relevance study: The respondent's medium of instruction.



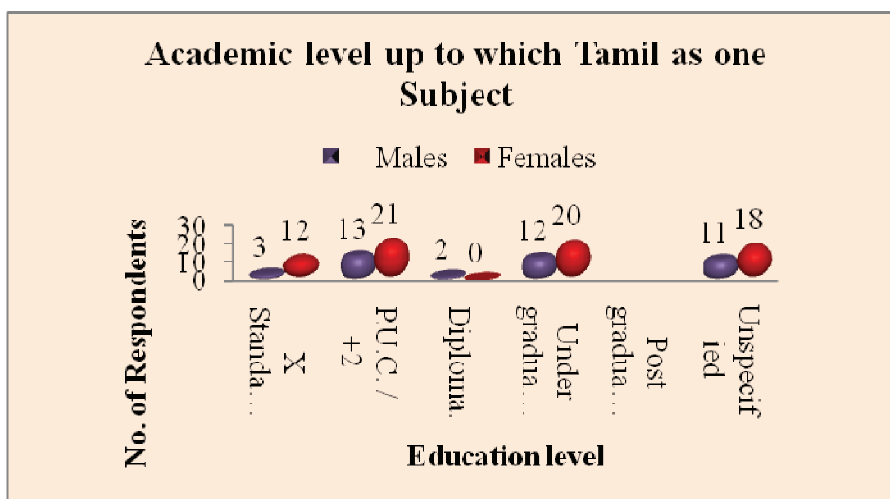
The illustrations on this page tell us about the level upto which Tamil was learnt as a subject.

Table: 24. Relevance study: Academic level upto which Tamil as a Subject.

Sex / Education Level	Males	Females	Total
X Standard.	3	12	**15**
P.U.C. / +2	13	21	**34**
Diploma.	2	0	**2**
Under Graduation+ Post Graduation.	12	20	**32**
Unspecified	11	18	**29**
Total	**41**	**71**	**112**

It is evident that 13.39% of the respondents had Tamil as a subject upto S.S.L.C. while 30.36% had Tamil upto +2 / P.U.C. level and 30.36% upto their college education.

Graph: 20. Relevance study: Academic level up to which Tamil as a subject



In the second part of the relevance study, the relevance score levels in percentage for each of the 16 kurals by different category of people were analyzed and tabulated herewith.

Table: 25. Relevance study: Category wise relevance judgment responses in %.

Response / Categories.	Strongly Relevant	Relevant.	Undecided	Not Relevant	Strongly not relevant	Not scored
Medical Specialists	35.16	54.69	7.03	3.13	0	0
Speech Therapists.	50.78	41.4	5.47	1.56	0.78	0
Special educators.	70.14	18.06	2.78	4.86	4.17	0
Teachers of Language subjects	49.22	32.03	7.81	7.03	3.91	0
Teachers-Non Language Subj.	47.32	36.61	6.7	4.46	2.23	2.68
College Students.	42.19	48.44	3.91	3.13	1.56	0.78
Individuals with disabilities.	64.06	28.13	7.81	0	0	0
Parents & Family members	47.62	38.1	8.93	4.17	0	0
Persons working with disabled	61.72	21.1	7.81	3.91	5.47	0
General Public	46.35	38.8	6.25	6.25	1.56	0.78
All categories together	**49.77 %**	**36.61%**	**6.64%**	**4.35%**	**1.95%**	**0.67%**

For easy understanding of the relevance status, the scores of strongly relevant and relevant were merged and given as positive scores. The relevance scores in 'not relevant' and 'strongly not relevant' were merged and given as negative scores. Bot the positive and negative scores are given in the next table.

Table: 26. Relevance study: Category wise positive and negative relevance responses.

Category.	**Positive scores in % (Strongly Relevant+ Relevant.)**	**Negative scores in % (Not Relevant+Strongly not relevant.)**
Medical Specialists	89.85	3.13
Speech Therapists	92.18	2.34
Special educators.	88.20	9.03
Teachers of Language subjects	81.25	10.94
Teachers-Non Language Subjects	83.93	6.69
College Students	90.63	4.69
Individuals with disabilities	92.19	0
Parents & Family members	85.72	4.17
Persons working with the disabled people	82.82	9.38
General Public	85.15	7.81
All categories together	**87.19**	**6.46**

The analysis revealed that the highest positive score of 92.19% was taken by the group of Individuals with disabilities and the lowest positive score of 81.25% was taken by teachers of language subjects. Only 6.46% of the respondents gave negative scores which included 4.35% as ‘not relevant’ and 1.95% as ‘strongly not relevant’. No negative relevance scores were taken by the individuals with disabilities. Interestingly, 10.94% was the maximum negative score and that was given by the Teachers of Language subjects. There were 6.64% of the respondents who could not decide about the relevance status. Special Educators took the minimum score of 2.78% for undecided response; whereas the group of parents and family members took the maximum undecided response score of 8.93%. Kuralwise positive and undecided scores are given in the next table.

Table: 27. Relevance study: Kural wise positive responses & undecided scores.

Sl. No.	Kural No.	Strongly Relevant scores and %	Relevant scores and %	Un-decided scores and %
1	95	49 (43.75%)	53 (47.32%)	3 (2.67%)
2	28	39 (34.82%)	50 (44.64%)	8 (7.14%)
3	126	33 (29.46%)	46 (41.07%)	22 (19.64%)
4	35	60 (53.57%)	38 (33.93%)	2 (1.79%)
5	414	54 (48.21%)	50 (44.64%)	4 (3.57%)
6	416.	53 (47.32%)	49 (43.75%)	7 (6.25%)
7	66	66 (58.92%)	26 (23.21%)	12 (10.71%)
8	664	68 (60.71%)	36 (32.14%)	3 (2.67%)
9	412	25 (22.32%)	48 (42.86%)	19 (16.96%)
10	392.	43 (38.39%)	39 (34.82%)	18 (16.07%)
11	200.	60 (53.57%)	43 (38.39%)	2 (1.79%)
12	411	52 (46.42%)	45 (40.17%)	8 (7.14%)
13	129.	80 (71.43%)	26 (23.21%)	1 (0.89%)
14	01.	62 (55.38%)	37 (33.04%)	4 (3.57%)
15	100.	70 (62.5%)	33 (29.46%)	5 (4.46%)
16	127	78 (69.64%)	29 (25.89%)	1 (0.89%)
	Total	**892(49.77%)**	**656(36.61%)**	**119(6.64%)**

The positive relevance score of 86.38% (49.77% as 'strongly relevant' and 36.61% of 'relevant') was taken by the respondents. Kural 127 (யாகாவா ராயினும் நாகாக்க*)* had the highest positive relevance score of 95.53% and the lowest negative relevance score of 1.78%. The poem 412(செவிக்குண வில்லாத போழ்து) had the lowest positive relevance score of 65.18%.and the highest negative relevance score of 17.88%.

Kural wise negative scores and 'no response' are given herewith.

Table: 28. Relevance study: Kural wise Negative and No response scores.

Sl. No.	Kural No.	Not Relevant scores and %	Strongly not Relevant Scores and %	No response scores and %
1	95	6 (5.35%)	1 (0.89%)	0 (0%)
2	28	4 (3.57%)	2 (1.79%)	1 (0.89%)
3	126	7 (6.25%)	4(3.57%)	0 (0%)
4	35	7 (6.25%)	5(4.46%)	0 (0%)
5	414	3 (2.67%)	1(0.89%)	0 (0%)
6	416.	2 (1.79%)	1(0.89%)	0 (0%)
7	66	6 (5.35%)	1(0.89%)	1 (0.89%)
8	664	5 (4.46%)	0 (0%)	0 (0%)
9	412	14 (12.5%)	6 (5.35%)	0 (0%)
10	392	7 (6.25%)	5 (4.46%)	0 (0%)
11	200	5 (4.46%)	1(0.89%)	1(0.89%)
12	411	5 (4.46%)	1(0.89%)	1(0.89%)
13	129	0 (0%)	2 (1.79%)	3(2.67%)
14	01	3 (2.67%)	4 (3.57%)	2(1.79%)
15	100	3 (2.67%)	0 (0%)	1(0.89%)
16	127	1(0.89%)	1(0.89%)	2(1.79%)
	Total	**78(4.35%)**	**35(1.95%)**	**12(0.67%)**

Kural 126 (ஒருமையுள் ஆமைபோல்) had the highest undecided response score of 19.64%. Only 0.67% of respondents failed to respond to a few kurals which might have been due to intentional avoidance or by mistake.This showed that familiar Kurals did not have equal amount of relevance score, but enjoyed differential relevance status among them. Hence, the said hypothesis is not proved to be correct.

Hypothesis 5: The concepts of Speech, Language, Hearing, and other Sensory inputs as explained by Thiruvalluvar have withstood the test of time and they are highly relevant even to today's healthy life.

We have seen that Thirukkural has a lot of concepts on Speech, Hearing, and other Sensory inputs and many of the modern scientific findings agree with the views of Thiruvalluvar. The results showed that a little over eighty six percent of the cross section of modern population thought that Thirukkural was still relevant to today's healthy life. The remaining fourteen percent could be the normal variations of relevance which could have been prevalent even during Valluvar's period. Since the age range of respondents was between eighteen to eighty three years, the judgments made from the questionnaire could be considered as fairly reliable. Since the results were obtained from various categories of people ranging from common man to high level professionals who are connected with this science of study, the results could be taken to represent the cross section of general population. It could be inferred that even now Valluvar's ideas and thoughts are relevant, valuable and useful to maintain a good and healthy life. Since these Kurals focus on daily human functions, it is worth to be followed as long as human beings exist. Though his views on a few poems are perceived to have come down on relevance, they can not be totally rejected as 'not relevant'. Since his conceptual knowledge is practical and core to any group, it cannot be totally ignored.

In many of the Kurals, the analogy given by him for different concepts is not only apt, but also great in expressing the poetic skill of Thiruvalluvar. In Kural 100 (இனிய உளவாக…..), he compares the use of pleasant words to that of ripe fruits and using harsh words to that of unripe fruits. In Kural 66 (குழல்இனிது யாழ்இனிது..), he places babbling in a much higher order than all other sweet music. By giving Stork as

an analogy, poem 490 (கொக்குஒக்க கூம்பும….) expresses the merit of three great good qualities namely patience, right time, and success. Kural 872 (வில்லேர் உழவர்…) places the administrator who has good speech skills over and above the level of a warrior. The apt rhyming word in Tamil for these professionals reveals the great literary skill of Thiruvalluvar. Kural 196 (பயன்இல்சொல…) gives a good analogy of chaff to that of a person who uses unwanted words. Kural 650 (இணர்ஊழ்த்தும…..) compares a person without teaching skills to that of flowers without any fragrance. In Kural 959 (நிலத்தில் கிடந்தமை…..), he compares the speaking skills to that of a sprouting seed. Poem 129 (தீயினால் சுட்டபுண்…..), compares the insults caused by harsh words with wounds of burns. Even in Kural 1 (அகர முதல….), he gives alphabets as analogy to God. Kural 392(எண்எண்ப ஏனை…") indicates that numbers and letters are like two eyes. Kural 1253(மறைப்பேன்மன்…),1203(நினைப்பவர்போன்று…),1312(ஊடிஇருந்தேமாத), 1317(வழுத்தினாள் தும்மினே…), and 1318(தும்முச் செறுப்ப..) uses sneezing as analogy. Kural 783 (நவில்தொறும்) compares reading good books with friendly relationships. In poem 475 (பீலிபெய் சாகாடும்), the overload of goods is compared with hyper function and abuse. Kural 476 (நுனிக்கொம்பர்…) indicates climbing up a tree beyond limits and meeting failures. Kural 576 (மண்ணோடு இயைந்த….) compares unkind persons to trees. In 1302 (உப்புஅமைந் தற்றால்….), salt is given as analogy for optimum function. Poem 25 (ஐந்துஅவித்தான…) gives the analogy of Lord Indra for not controlling senses. Poem 126 (ஒருமையுள் ஆமைபோல) gives an analogy of a tortoise for controlling senses. Kural 706 (அடுத்தது காட்டும்….) compares the mirror to that of the face. In Kural 151(அகழ்வாரைத் தாங்கும்….) tolerance of insults is compared to that of earth. Kural 412 (செவிக்குணவு….) compares the appetite for food and thirst for knowledge. Kural 415 (இழுக்கல்

உடையுழி….) compares the good counseling to that of having a stick while walking on a slippery floor. Poem 65 (மக்கள்மெய் தீண்டல…) compares the happiness derived out of listening to babbling to that of touching and stroking our children. Kural 413 (செவிஉணவிற்…) compares the persons who can hear the sound to those of divine forces. These examples are found to be true and correct up to these modern times and the concepts are applicable for every one at any given time. All the concepts and words expressed in Kural are general in nature and no specific term is used. For example Valluvar has not used any specific name of a language like Tamil when he wanted to speak about language or for that matter the name of a religion or a caste. Valluvar speaks in general abstract terms. This has made it possible, to have withstood the test of time even after about two thousand years of its genesis. His abstract moral instructions are unique in character and have not been touched even by the modern day scientific community. His perfect prescriptions are best suited to any community and very practical in its nature. Thus it can fairly well be concluded that Thirukkural has been a living literature and a strong guiding force for the development of community and mankind. It is recognized to be highly relevant even to today's healthy life. Since it is based mainly on human factors and has the guidelines to regulate them, the optimistic and pragmatic views of Thirukkural will surely be applicable far into the future. Kulandaiswamy V.C. (2002: 14) says that Valluvar has been extremely careful not to deal with matters of knowledge that grow and change with time. Though many of the Kurals are not 'very familiar' to the public, the relevance of kural concepts are considered to be high by majority of the respondents. This confirms that the Kural has withstood the test of time and is relevant even now. This study confirms the statement of this hypothesis and is found to be true.

Hypothesis 6: By following Thiruvalluvar's concepts of Speech, Language, Hearing, and other Sensory inputs, men can meet even the difficult challenges and reach greater heights of skill achievement with empowerment. Many people can rise to the level of great leaders, guides, and role models.

Even to achieve the socially accepted average level of communication skill, a well organized and integrated function of many systems of our human body are required. For the advanced and sophisticated level of refined Speech, Language, Hearing and other Sensations; still higher level complex activities are demanded. In the process of our attempt for achieving this credit, we might face many difficulties, hurdles, and challenges in our life. David Crystal et al (1995:13- 20) says, "Elocution is the art of clear speaking in public, as judged by the cultural standards of the time. It aims to develop the speaking voice to its aesthetic and rhetorical peak. It is well beyond the point which is necessary for the continuance of everyday communication". He also quotes Clara Claiborne Park who discusses the battle for communication with an autistic child.Though linguistic difficulties in autistic children are a part of spectrum disturb ances, the prevalence of communication disability is more evident. Communication impairments have profound consequences on educational, social, and economic development for the sufferers. To achieve even the basics of communication, one may have to face a lot of difficulties. Our modern science has come up with various methods and techniques to conserve the available functions, to prevent the occurance of any difficulty or problems, to identify any such problems at an early stage, to correct or treat it effectively and also to augment the defect. Like modern science, all these Kurals also have given many guidelines which will definitely help in communication enhancement.Valluvar has given valuable and advanced ideas for communication excellence, to face any challenging situation, and

to achieve success in life. Such a possible gain from a literary creation is brought to light by a report given by Sarthak Saraswat (2015: Edu.2) who quoted a study done in England named 'Philosophy for children'. The results of the study revealed, "…. that the math and reading levels of primary school students improved after discussions conducted about truth, fairness, or kindness". Thirukkural ideas in general and about communication in particular, with its universal nature; are acceptable by any religion, any race, any caste, any creed or any denominations of the world. By strictly following his ideas, people from any sect can rise to the level of great leaders, guides, and role models and reach greater heights. Many popular religious heads, great academic scholars, political leaders, excellent professionals, determined industrial entrepreneurs, successful business people, and great teachers can be cited as best examples for possessing these good communication skills. Most of the empowered persons who came across lots of difficult challenges in their life, had achieved desired positive skills through sheer determination. Eventually they became outstanding leaders in this competitive world and lived as role models for many other persons. Many of these scholars and leaders had boldly faced challenges in their life by sincerely following many of the virtues as told in Thirukkural.

Rajaram M. (2009: XI) says, "The dynamics of Thirukkural has been richly complimented by various scholars. Leo Tolstoy is reported to have taken the concept of non-violence from Thirukkural. Sri Aurobindo stated that Thirukkural is gnomic poetry, the greatest in planned conception and force of execution ever written in this kind. Rajaji is quoted as saying that Thirukkural is the gospel of love and code of soul– luminous life. Dr. Zakir Hussain, former president of India said that Thirukkural is a treasure house of worldly knowledge, ethical guidance and spiritual wisdom". Abdul Kalam A.P.J., former Indian president, in his message to the book by Rajaram

M. (2009: XIII, IX) said that Thirukkural is considered to provide the code of conduct for the humanity of the planet earth for all time, which makes the past meet the present and creates the future. Though it is not that easy to follow Kural's views, it is also not impossible to practice its instructions. He also said that Thirukkural could become a part of the people's guide in their day to day living, leading to the promotion of an enlightened citizen, who in turn will make the realization of peaceful, happy and harmonious planet earth. Since communication is an important adaptive behavior, enrichment of it will be the foundation for all other developments. A good Speech, Language, and Hearing skills will help in empowerment. So, Kural can help anybody to rise to greater heights and become great leaders, guides, and role models. Thirukkural can guide people in their day to day life and they can become enlightened citizens. In turn a peaceful, happy and harmonious planet earth can be realized. This confirms that the ideas of Kural can help to face genuine critical challenges of life and for achieving human excellance. Hence this hypothesis No: 6 is found to be true and Kural can be a useful tool.

Hypothesis 7: Thirukkural helps to show the public a divine channel for a healthy, peaceful, and happy life with much better human behavior and public relations.

Swami Srikantananda (2005:65) says, "Spiritual strength is the highest strength, the next being intellectual, and the last is physical / sensual level. Regular study of the scriptures, teachings of great luminaries and discussions on spiritual matters help us to develop right understanding". Modern science deals with only physical and intellectual aspects of the specific field and has helped us to grow only up to a certain level. The present day science study pertaining to these topics has explained about medical, technical, linguistic, behavioral, and social aspects of

different topics of communication. But all these models and branches have failed to deal with the higher level abstract concepts of moral and ethical values in communication science which is well explained in Thirukkural. The achievement of just physical and intellectual aspects of Speech and Language science does not confirm the knowledge of morality and ethics. This indicates that modern science has failed to develop skills for total development. But Valluvar has shown the additional extended path to develop ethics and values in communication science. If we effectively understand and learn these additional skills, our individual achievement and progress will be complete, better and much more refined. This growth with total positive values can definitely lead us to have a prosperous, peaceful and healthy life. In line with the definition of World Health Organization (W.H.O.), Kural can help to achieve good health to all the citizens. Shelley E.Taylor (2006:4) quotes W.H.O. definition which says, "… health is a complete state of physical, mental, and social well being and not merely the absence of disease or infirmity." David Werner (1994: w7) also says, "Health is more than not being sick. It is the well being: in body, mind, and community. People live best in healthy surroundings, in a place where they can trust each other, work together to meet daily needs, share in times of difficulty and plenty, and help each other learn and grow and live, each as fully as he can. Though we can do our best to solve our day to day problems, we have to remember that our greatest job is to help our community to become a healthier and more human place to live." Since Kural gives many valuable ideas on body, mind, and moral aspects; it has shown a path for a healthy life. Swami Srikantananda (2005:59) says that everyone is seeking joy, happiness and peace in this world without knowing that these are already within them. Swami Vivekananda (2009: 49) says that spiritual truth is purity. He said, "… Blessed are the pure in heart, for they shall see God". By explaining a lot of

moral values in his poems, Thiruvalluvar taught purity at all levels which is the basis for spiritual truth. He added precision and merit in addition to that of medical and technical aspects of communication. Thus he has shown a divine channel for a healthy and peaceful life.

Through Kural poems, Valluvar has helped us to have self realization and shown us the way to utilize the available potential within us for the future growth. A strong use of these ethical and moral values will not only help us to improve our personal growth, but also the progress of community and the society at all levels. As this additional skill can enhance our public relations, we can make this world a better and happy place to live in and enjoy. In Kural 621 (இடுக்கண் வருங்கால்…), he asks people to smile or laugh away the difficulties. Here, the contrast condition works as antidote for the problems faced. Nothing else can be a better solution than this advice to be happy even at critical times. Instead of running away from the given situation, he asks us to boldly face the challenges to gain confidence. Since communication guided by moral and ethical values alone can improve human behavior and public relations acquiring that skill will bring peace, harmony and better quality of life on earth. To achieve that ultimate target, Thiruvalluvar with kural poems has shown many avenues, royal roads and divine channels for progress. As all his guidelines can be easily followed with regulated approach, the achievement of this goal for excellence is very much within our reach. His ideals are not only to be read, but also to be systematically followed and practiced to enjoy an improved, happy, and healthy life. The results confirm that Kural has shown a good channel for human development and the said hypothesis No: 7 is found to be true.

CHAPTER V

SUMMARY AND CONCLUSION

About 2000 years back, Thiruvalluvar wrote Thirukkural poems in Tamil which contained 1330 Kurals in 133 chapters. It focused on different aspects of life and contained a lot of scientific facts that are still useful to mankind. His exclusive contribution of chapter 42 titled "Listening-கேள்வி" and chapter 65 titled "Power of Speech-சொல்வன்மை" indicate that Thirukkural did talk well about these two topics of Speech and Hearing. In addition to these two chapters, Valluvar in various other chapters also documented the science of Speech, Language, Hearing and other Sensory inputs. It shows that Thiruvalluvar had a vast knowledge of varied topics of life-skills including communication. All the Kurals which are connected with the topics of Speech, Language, Hearing and other Sensory inputs were listed and it came to about one hundred and twenty five couplets. This list included forty six Kurals from division I titled- Righteousness / Virtues (அறம்), sixty three Kurals in division II titled- Wealth (பொருள்), and sixteen Kurals in division III titled Pleasure / Love (இன்பம்). The literature and the results of many of the present day modern scientific studies support, reject or differ from the expressions and contents of these Kurals. Since this study of Thirukkural on the topic of Speech and Hearing is the first of its kind, not much of earlier literature is available. But still, available modern study materials relating to the subjects of Speech and Hearing have been presented.

Speech as a social behavior and Pleasant Speech: To prove the first hypothesis, the Kurals on topics of Speech and Language were cited to give evidence. Thirukkural 1198 in Referance No: 001 connects the speech act well with that of

social behavior and says that the interactive speech becomes essential for maintaining a good social relationship. Modern science also has proved that, people with speech and language problems fail to develop good social interaction. Pleasant sweet speech is important and its need is well expressed in Kurals 95, 1121, 98, 97, 525, 387, 100, 99, 953 and 66. Thirukkural 95 in Referance No: 002 with very high relevance score and also supported by Brown's study says that sweet words add beauty to our regular speech. Kural 1121 in Referance No: 003 say that possession of soft speech is a distinguished and welcome character. Kural 98 in Referance No: 004 probably implying the genetic base of speech, reveals that the quality of soft speech without any evil thoughts will be carried out to subsequent generations. Kural 97 in Referance No: 005 say that sweet speech will bring happines and prosperity without any regret. Kural 525 in Referance No: 006 say that polite speech can be used for social attraction and to develop a big interpersonal network. Kural 387 in Referance No: 007 say that pleasant speech is a good attribute and has positive value even to the kings and it will ensure good governance. The use of such abstract and ethical words like 'இன்சொல்-sweet word' in Kural which are used as adjectives for speech and language are not usually expressed in modern science of speech and hearing. Kural 100 in Referance No: 008 had very high familiarity and relevance scores. It advises us to use only the pleasant words for sure progress and development. Kural 99 in Referance No: 009 tell us to avoid abusive words in our language. Instead of giving a direct answer for doing or for not doing something, he makes us analyse and critically think about both positive and negative aspects. Kural 953 in Referance No: 010 say that use of pleasing words is one of the good qualities of true nobility and that can be cultivated by practice. Kural 66 in Referance No: 011 which enjoyed very high relevance score tell us that the prattle of children is sweeter than any instrumental

music. Kural 198 in Referance No: 012 say that wise people analyze carefully and use only the meaningful worthy words. It is said that even in lapsed conditions, the useless words should not be used. Kural 826 in Referance No: 013 say that foes by using cunning speech may deceive us and their evil intentions may impede our progress and advancement.

Appropriate Vocabulary: Kurals 649, 191, 721 and 645 speak about the correct use of vocabulary in our expressions. Kural 649 in Referance No: 014 tell us about the importance of using the appropriate and apt word in our speech and this idea is well supported by many reported studies. In line with the study by Mary Joe Osberger, Kural 191 in Referance No: 015 speak about the use of correct words for a good expression and the consequences of failing to do so. Kural 721 in Referance No: 016 tell us to use the correct word boldly in an assembly without any fear. This indicates that a strong vocabulary is a must for gaining confidence and courage. Kural 645 in Referance No: 017 in accordance with modern studies emphasizes the importance of using appropriate and strong word which cannot be refuted by any argument and that indicates one’s level of conceptual growth.

Pragmatics, utilisation of opportunities, and understanding the audience: Kurals 490, 644, 714 and 715 tells us about pragmatic language. Kural 490 in Referance No: 018 with its implied meaning tell us to grab the favorable, right, and good opportunity with swiftness at the proper time to achieve success. This holds good for language functions also. Kural 644 in Referance No: 019 advises us to understand the qualities of our listeners so as to make our speech most appropriate and this point is supported by the views of Margaret Lahey. Kural 714 in Referance No: 020 urge us to adopt the style and content of our speech to suit the educational status of the audience. Kural 715 in Referance No: 021 with least familiarity score

speaks of the merit of turn-taking and one has to be polite and humble while expressing one's views in an assembly of superior accomplishers and elders. Kural 127 in Referance No: 022 with very high familiarity and relevance score say that inspite of our strength, we should restrain from using harsh words and mind our tongue and words while speaking. Kural 694 in Referance No: 023 say that in the group discussion at a king's court, a short circuited internal communication like a whisper or a smile has to be avoided. Both of these views are supported by Peter J.Velletutti and others. Kural 335 in Referance No: 024 say that since life is not permanent, we have to do the virtuous deeds we wish to do immediately without any delay. Since loss of speech comes before death, he advices us to do things well before any such situations. Kurals 711, 712 and 713 tell us about assessing and understanding the type of audience. In that, Kural 711 in Referance No: 025 and Kural 712 in Referance No: 026 emphasize the use of appropriate words according to the need and nature of the audience. Kural 713 in Referance No: 027 warn about the inadequate framing of speech which does not match the need, prevailing situations, and the nature of the audience. Kural 872 in Referance No: 028 say that even if we happen to develop hatred towards warriors, we should never go to the extent of hating good speakers or scholars.

Useless speech and Diplomatic speech: Kurals 194, 192, 193, 195, 196 and 197 forewarn us about the problems which might arise due to useless speech. Kural 194 in Referance No: 029 tell us that the use of virtueless and unethical words might force a person to be considered useless. Kural 192 in Referance No: 030 say that the practice of useless speech in the presence of many people or large audience will bring bad results. Kural 193 in Referance No: 031 say that if a man utters useless words, he will reveal himself in a bad shape as virtueless. Kural 195 in Referance No: 032 say

that if one uses vain words, he will lose eminence and high status. Kural 196 in Referance No: 033 say that a person who repeatedly uses unnecessary, unwanted and useless words will be considered worthless by the society. Kural 197 in Referance No: 034 say that wise people will not use vain words. Kural 646 in Referance No: 035 reveal that a diplomatic speech should not only motivate the listeners to hear, but also should help him to grasp all the meaning of that speech.

Back-biting / Teaching skills / and harmless falsehood: Kural 181 in Referance No: 036 and Kural 184 in Referance No: 037 criticized back biting and advise us to avoid that type of speech. Kural 650 in Referance No: 038 speak about people who lack teaching skill and compare them to flowers without fragrance. Kurals 292 in Referance No: 039 and 291 in Referance No: 040 explain about the benefits of harmless falsehood and Valluvar gives a practical definition of falsehood which may be classified with truth. He says that truth also includes speaking those words which are free from the least degree of evil to others. Truth is also subjected to the additional test of harmlessness.

Speech as an index of nobility and administrative skill: Kural 959 in Referance No: 041 say that Speech can be an index of one’s background and nobility status. The careful use of the word ‘kulam-குலம்.’ in Thirukkural explains the versatility of his literary skill. Kural 386 in Referance No: 042 say that the whole world will exalt the country whose king is easily accessible and who is free from harsh language. Kural 139 in Referance No: 043 say that well behaved people with high values will not use unacceptable bad words even by mistake. Kural 1057 in Referance No: 044 explain that even beggars rejoice exceedingly, when they behold those who bestow their alms with kindness and courtesy. Kural 199 in Referance No: 045 say that wise men will speak without faults and will not utter non-profitable

matters. Kural 200 in Referance No: 046 with high familiarity and relevance scores insist on useful speech and advise to avoid useless words. Kural 187 in Referance No: 047 says that only those who fail to understand the fact that a good friendship can be maintained by cordial communication process, will use insulting speech to break the existing good relationship. Kural 129 in Referance No: 048 with high familiarity and high relevance scores says that unlike a burn injury; the agony, pain and the hurt feeling caused by an insulting speech will remain forever in the mind of the hurt person. Kural 35 in Referance No: 049 say that we can achieve virtue by avoiding the behaviours like envy, desire, anger, and bitter speech. Kural 696 in Referance No: 050 speak about the right use of effective speech with appropriate timing and situation. Only after knowing the king's convenient time and a complete knowledge of the situation, the minister should intervene and discuss the issues with him. The desirable matters should be segregated and put in pleasing language and in an acceptable way. Kurals 567 and 568 warns us about using harsh speech. Kural 567 in Referance No: 051 say that the harsh speech and excessive punishments used by a king will reduce the king's power of resistance against enemies and spoil his victory. Kural 568 in Referance No: 052 say that some kings do not listen to the valueable ideas and advice of ministers or scholars and subsequently they will meet the failure. This may bring anger in them and use harsh words which may result in losing their wealth and fame.

IncoheLance between speech and action: Poems 185, 183, 182 and 824 speaks about incoherence between speech and deeds. Kural 185 in Referance No: 053 say that people who speak ill of others in their absence and offer praise in front of them will not have coherence between their speech and actions. Such persons are not interested in the welfare of others. Kural 183 in Referance No: 054 say that speaking ill of others in their absence and praising them in their presence is a bad habit and it

leads to a false life. As it is not considered a virtue, he says that they could rather end their life. Kural 182 in Referance No: 055 says that praising somebody and smiling deceitfully in their presence, but reviling him with an aim of destruction, is a greater evil and worse than directly decrying him. Kural 824 in Referance No: 056 also say that a cheat with deceitful smile is very dangerous and one should fear to have friendship with him. Kural 128 in Referance No: 057 says that even if a man has made only one attempt at using evil speech which was productive, that alone is enough to make all his earlier good deeds lose their benefit. Kural 119 in Referance No: 058 say that only those who do not have crooked thinking will have plain speech without prejudice. Kural 664 in Referance No: 070 with high relevance score speaks about the difficulties in transforming speech into a meaningful and useful activity. Anyone can formulate plans, but it is only the exceptionally good person who can carry out the plans to fulfilment. Kural 514 in Referance No: 071 speak about the need of both skill-training and aptitude for tuning a person fit for a specific job. Even in patients with speech problems, constant training can bring better speech.

Speech as a measure of developmental yardstick: Kural 647 in Referance No: 059 say that a convincing style of debate, untiring speech, good memory and fearlessness will make a councillor invincible and for that he has to be strong in his language. The preference of speech over gestures by Helen Keller is a strong support for verbal communication. Kural 641 in Referance No: 060 say that good persuasive speech is a unique positive quality and is better than many other good skills of a person. Even in those authoritative days of ancient monarchial Tamil Kingdom, democratic principles and the style of debate were much in practice and important decisions were made accordingly. Kural 635 in Referance No: 061 state that a person with virtue, knowledge, superior vocabulary, and excellent skill were considered to be

fit for any ministerial job. Speech ensured administrative capacity and good governance. Kural 28 in Referance No: 062 which enjoyed high relevance score say that speech and language skills can be the basis for one's academic accomplishments, social strengths, and other life-skill achievements. This can lead to fame and prestige in this world. Kural 682 in Referance No: 063 speak about devotion and love to one's country and to the king. In that poem, the possession of effective speech in addition to the thorough knowledge of political situations, and critical thinking, are said to be the essential qualifications for all envoys. Kural 564 in Referance No: 064 say that the king who gets the critical feedback from the public as cruel, sadistic and offensive will perish quickly.

Importance of letters, numbers, speech and language: Kurals 1, 392, 643, 648 and 642 speaks about these concepts. Kural 1 in Referance No: 065 have high relevance scores and gives Godly status to language in the very first couplet itself. This signifies the importance of language function for which Valluvar offers the highest priority among all other attributes. Kural 392 in Referance No: 066 with high relevance scores explain the importance of numbers and letters which are the basis of mathematics and literary creations in language. He says that these two meritorious skills are precious possession of mankind and can enhance one's knowledge and thinking. It is amazing to note that by projecting numbers on a priority basis, Valluvar had the wisdom to look at it as a prospective future key of human society. Kural 643 in Referance No: 067 say that a good orator's speech should have the capacity to quickly bind the relationship with listeners and to hold it on. Even for the unconvinced audience and enemies, it should be pleasing in nature and create a desire for further listening and for maintaining continued friendship. Kural 648 in Referance No: 068 say that the world would readily accept those councillors who can speak on

various subjects in proper order and in a pleasing manner. Kural 642 in Referance No: 069 say that as speech can bring either huge gain or great loss, all should be careful in their conversation and guard themselves against faulty speech.

Non-verbal communication and Reading skills: Kurals 1100, 1274, 1271, 701, 1253, 1203, 1312, 1317, 1318, 271, 1040 and 621 deal with non-verbal communication. Kural 1100 in Referance No: 072 reveal that when there is perfect agreement between the eyes of lovers, the oral speech becomes useless. He says that eye-contact can express and communicate a lot of ideas than what words can. This is more and very common in persons with hearing impairment and deficient in children with autism. Kural 1274 in Referance No: 073 say that a silent expressive smile is like a flower bud and can contain a lot of message in it. Kural 1271 in Referance No: 074 say that though one would like to conceal the inner feelings and avoid expressing intentions overtly, the disturbed eyes would expose the hidden message. This does agree with the expression “face is the index of mind”. To avoid this conflicting and contradictory expression, it is warranted to keep our thoughts, speech and actions on the same wavelength. Kural 701 in Referance No: 075 say that a minister with good intuitive skills should be able to understand the king’s mind by just looking at the king’s body-language alone. Since body-language provides only abstract concepts, it requires more skill to understand them. Kural 1253 in Referance No: 076 talks about the difficulty in controlling one’s lust and it is as difficult as controlling the involuntary activity of Sneezing. Kural 1203 in Referance No: 077 talks about the dilemma of thought process among loving partners. It is based on a belief in Tamil culture that if we get a sneeze, it implies that someone is thinking of us. Kural 1312 in Referance No: 078 say that a temporarily suspended communication between lovers is expected to begin with a non-verbal act like a sneeze. During the time of sulk, in order

to break the ice by tempting her to utter a blessing message, he starts to sneeze. Here the temporarily suspended communication is expected to begin in a non-verbal mode. Kural 1317 in Referance No: 079 say that these non-verbal communication methods such as a sneeze may end up in doubting the integrity of the loving partner. Kural 1318 in Referance No: 080 also speak about the lover's doubt about the partner's real intention of a suppressed sneeze. Many a times, as the non-verbal communication is abstract in nature, it does not express ideas explicitly. Kural 271 in Referance No: 081 describe one's smile to be a non-verbal form of communication.When somebody secretly breaks the law of celibacy and even though others do not detect his shameful crime, his five sense elements will laugh at him deviously for committing a cardinal sin and for living a false life. This implies that we will have to answer our conscience. Kural 1040 in Referance No: 082 say that the maiden earth will laugh at those people who lead an idle life due to laziness. In many places, Thiruvalluvar gives such inanimate references. Kural 621 in Referance No: 083 speak about an optimistic approach even during difficult times. He asks us to laugh even when unfortunate events or troubles bother us. This should be the best strategy to drive away sorrow. Kurals 683 and 783 are about reading skills**.** Kural 683 in Referance No: 084 speak about the required reading abilities of envoys. The knowledge of real and latest information in-depth will make an ambassador more powerful and strong and this skill can be achieved by vast reading. In Kural 783 in Referance No: 085 he compares the maintenance of a good friendly relationship with noble persons to the act of valuable book reading.

Optimum function without any resource abuse: Kurals 475, 479, 480 and 476 tells us about the need of optimum functioning of any entity and the resultant problems faced because of overloading or under utilisation.The problems of hyper and

hypo functioning, faced in Speech and Hearing science are evident in many reports of literature. Kural 475 in Referance No: 086 reveal the breakdown due to overload and the subsequent strain. The implied overloading in structure or hyper functions of Speech and Hearing mechanism can cause problems in communication and also in general health. Kural 479 in Referance No: 087 speak about optimum functioning and judicious use of available resources, without any abuse or misuse. Kural 480 in Referance No: 088 speak about optimum functioning and indicate that for economical balance, resource abuse should be avoided. Kural 476 in Referance No: 089 say that we should know our limits while going for optimum functioning. Vocal abuse is one good example which may cause aphonia or dysphonia. Kural 534 in Referance No: 090 say that people with poor memory and fear will not achieve greater heights. This perspective of Valluvar can explain the language problems seen in persons with specific language impairment, stammering and also cognitive challenges.

Sensory input enhancement and regulation: The following Kurals about hearing and sensation add strength to prove the scientific base that Thirukkural enjoys on these topics. Kural 575 and 576 speaks about the meaningful vision. Kural 575 in Referance No: 091 say that a look filled with kindness and passion is said to add beauty to the eyes and Valluvar acclaims humaneness. His ideas are well supported by modern science. Kural 576 in Referance No: 092 tell us about the quality of visual perception and people who never look kindly on others are condemned and compared to trees. Even from the general public, he expects excellent qualities of humanism. Kural 27 in Referance No: 093 reveal the clear knowledge which Valluvar had about the importance and the positive influence of sensory stimulation on intellectual growth, and language development. Kurals 1302, 24, 25, 126, 6, 343 and 354 tell us about regulating the sensory inputs. Kural 1302 in Referance No: 094 speak about the

limited amount of feigned dislike one can safely exert on others and still sustain the developed relationship. By giving the example of salt, it is said that too much or too little of sensory stimulation can bring negative results for both body and mind. Kural 24 in Referance No: 095 speak about regulating sensory inputs. He emphasizes the importance of giving positive sensory inputs, for which we need the much required wisdom. So, it is important that one should avoid utilizing faulty sensory inputs. The Verse 25 in Referance No: 096 explain that people who cannot control their sensory inputs will ultimately end up in failures, and meet the downfall. To avoid such mistakes we have to be careful in processing only selective positive sensory inputs. Tirukkural 126 in Referance No: 097 give the example of a tortoise to emphasize self control and restrain from the tempting pleasures. Those who live with sensory regulations will find protection and happiness in all their births. Kural 6 in Referance No: 098 say that people who avoid falling prey to the bad sensory inputs and remain Godly, will be blessed with permanent happiness. Kural 343 in Referance No: 099 also speak about regulating and controlling the sensory inputs. Only when we completely lose interest in material wealth, we can be considered winners in life. Kural 354 in Referance No: 100 explain about the importance of cognition and insight knowledge of past experiences in sensory input regulation. We should process selective sensory inputs to develop critical thinking, to form concepts, and to execute meaningful activities. Only with proper application of mind, we can associate our sensory inputs with previously available knowledge. This idea is well supported by modern research findings.

Selective listening and faulty sensory inputs: Kurals 416, 418 and 1199 tell about these concepts. Kural 416 in Referance No: 0101 says that even if it is a minor point, one should carefully listen to good ideas and assimilate them to produce great

results.The processing of positive sensory stimulus helps us to become noble, dignified and honoured with a good name and respectable fame. Kural 418 in Referance No: 102 also say that the ears which are not well stimulated by good moral instructional facts are practically considered deaf (functionally deficient) ears. Listening to the thought provoking good values alone account for effective hearing. Many of the present day conflicts at home or community or at national or international level can well be attributed to the lack of teaching of moral values. Kural 1199 in Referance No: 103 say the importance of hearing the speech of loved ones even in adverse and failed relations. A lady explains that though her beloved lover fails to shower love on her, it is still sweeter to hear a word of expression about him. The selective listening of positive stimulus brings joy and happiness. Kural 417 in Referance No: 104 explain that scholars who have profoundly studied and diligently listened to instructions will not speak foolishly, even if they have imperfectly understood a matter of topic. Kural 1228 in Referance No: 105 tell about the requirement of a satisfactory and conducive environment to activate, materialise, and positively achieve all our genuine input stimulations. A positive mindset and a thorough preparedness can decide the success of stimulus-response action.

Sensory deprivation: Kurals 1261 and 9 talk about sensory deprivation. Kural 1261 in Referance No: 106 relates to the status of a lady who has been unsatisfactorily waiting for a long time to meet her lover. It says that sensory process may fade or diminish, if it is not constantly or periodically stimulated until its stabilization. The prolonged absence of target stimulus can have negative impact and results in subsequent fatigue or failure to stabilize an activity. So, stimulus presentation at least in periodical intervals is necessary to continue the ‘on effect’ to get the desired response activity. Modern science also confirms this view. Kural 9 in

Referance No: 107 talks about sensory losses. It says that a person, who does not worship God, is as useless as a sense organ without the power of sensation. Kural 1101 in Referance No: 108 tell about multi-sensory stimulation. He says that ladies are the only potential source of giving a satisfactory and simultaneous pleasurable sensory stimulation and enjoyment to men through all modalities.

Signal detection by intuition: Kurals 703, 706 and 1275 say about signal detection by intuition**.** Kural 703 in Referance No: 109 say that the king should carefully and correctly identify those persons with intuitive capacity and utilize their good services at any cost. Such people should be acquired and his services have to be utilized for better benefit and development of the nation. Avvaiyar also say that such people are assets to all. Kural 706 in Referance No: 110 also say that the face is the index of mind. So, a keen observation of it can give good clues to understand one's personality. Kural 1275 in Referance No: 111 says that the well-meant cunning departures of the lover, who secretly left with tightly fitted bangles; have an inbuilt remedy to cure the great sorrow of men. It says that the non-verbal signals provided by the lover can act as medicine to alleviate his deep sorrows. Mutual understanding of non-verbal signals can help in expressing ideas and sometimes, it can even be better than verbal expression.

Tolerance to harsh sensory inputs: This view is clearly said in Kurals 389, 151, 159 and 160. Kural 389 in Referance No: 112 say that the whole world will dwell under the umbrella of the king, who can bear the words that embitter the ear. Even if the feelings and sentiments of the King are hurt, he should learn to tolerate such criticism and adverse comments. Under the umbrella care and governance of such magnanimous kings, citizens will definitely feel secured and live happily. Kural 151 in Referance No: 113 also express this good virtue of tolerance for harsh

comments. He says that as the earth bears up those who are digging it, we have to bear with those who revile, insult and do wrong things to us. Forgiving becomes a good trait, attitude, and a desirable virtue. Kural 159 in Referance No: 114 say that those who tolerate and show the good forbearance even in the face of insults are considered as purer than ascetics and are worth to be admired. Kural 160 in Referance No: 115 say that the people who tolerate insults with forbearance and endure the attacking un-courteous speech of others are considered even one step better than people who do penance.

Importance of Hearing: Kurals 411, 412, 414,419, 420, 415, 65 and 413 say about the importance of hearing / listening. Kural 411 in Referance No: 116 with high relevance score says that the wealth gained by the ear, by its listening power; is the chief of all wealth. Since listening helps in developing a good communication, intellectual enhancement, and knowledge; he has given a great value for this listening skill. Kural 412 in Referance No: 117 say that only when we do not listen to the oral instructions, we should consider giving little food to the stomach. Though hunger and thirst are the primary physiological needs of our life for which food and water are considered to be the essential and basic supplies, Valluvar gives preferential importance to the perceptual skill of listening. Kural 414 in Referance No: 118 say that even in the absence of any academic learning, a man should listen carefully to the teaching of the learned persons. He gives the wonderful example of a walking stick which will be very useful in adverse and difficult walking situations. Even in illiterates, hearing plays a crucial role to develop knowledge and skill excellence. Kural 419 in Referance No: 119 say that for persons with deficient hearing, it is difficult to have good speech development. Always the speech and language development particularly in developmental period will depend on the status of one's

hearing capacity. Any degree of failure in receptive or expressive verbal language interferes with the educational process and written language development. His intricate knowledge to link speech and hearing is a great scientific truth which is very relevant even today and also for ever. Kural 420 in Referance No: 120 explain about the need for good hearing and listening of the clear instructions to have a meaningful life. People with deafness were considered as less privileged. In evolution, he considers them in the lower level of birth order. He questions the very existence of such people, because nobody could benefit from them and were considered as burden to the society in those days. We have a reason to believe him because similar ideas were prevalent in other cultures and civilization as well. The history of deafness reveals that Romans, Greek, Egyptian, and Europeans also had similar views. This idea of Valluvar could have been told to the best situation prevalent during his period of time. But now the latest development in Science and Technology has brought many advancements and sophistication in disability rehabilitation. Instrumentation including cochlear implants, refined therapeutics and teaching methods to impart Speech and Language skills and advanced educational strategies have supplemented to overcome the problems in their communication and the academic learning. But it is true that even now, the problems of people with disabilities are not fully eliminated. So his views about this Kural may have to be re-considered for its present day relevance. It can be safely said that though the relevance impact for this Kural seem to be reduced, it is still relevant for today's healthy life.

Kural 415 in Referance No: 121 give the importance and usefulness of listening to the intellectual words of wise and disciplined scholars. In the absence of learning situations through the readings of desired books, their management skills can be still made better with the good listening of scholarly ideas. Even the well educated

and skilled persons are advised to give due respect to other's views and ideas. Getting such ideas through counseling and utilising those suggestions in their life situations will help to overcome difficulties. Kural 65 in Referance No: 122 tell about the greatness of hearing human voice - the babbling. It says that as the sense of touch gives the pleasure to mother and associates, listening to the child's babbling speech gives pleasure to the ear and to the mind.Valluvar infers that listening to speech is not only a routine day to day activity, but also gives a unique pleasant experience to us. His comparison of the sense of touch for listening shows the depth of his knowledge on sensation. Kural 413 in Referance No: 123 says that those who enjoy instructions which is the food of the ear; are equal to Gods and they will be free from sufferings. By saying high about this listening skill, he indirectly gives importance about the conservation of hearing. He says that if a person gets a good listening skill which is a pride to anybody, it should be considered as a blessing of our life and should be safely protected. We should take care to protect our hearing from the possible damages that can be caused either by loud noise, or oto-toxic drugs, or severe viral infection, or infectious diseases, or damage due to wrong mechanical manipulation of ear etc. High risk factors arising from genetic and acquired causes in pre-natal, natal, and postnatal periods should be taken care of.

Use of ability to combat disability: Kural 504 in Referance No: 124 tell about weighing ones strength of good qualities and not about his defective weakness. By knowing both the good and undesirable qualities of a person, the king can make a judgment about a person by weighing his merits. Even the best of brains may exhibit some ignorance. Since perfect people are not available in this world, a practical prescription is given by Valluvar. In Speech Pathology, ignoring normal variations or occasional difficulties or random errors; particularly in the developmental period is a

diagnostic criterion. The great achievements of people like Helen Keller with disabilities are strong examples and supportive evidence for this Kural idea.

To face the problems in its reality: Kural 1102 in Referance No: 125 tell us to face the challenges in its reality. He says that the disease itself is a remedial cures in love affairs and the lover itself a salvation for related issues. Similar trend is also seen in the rehabilitation of speech and language problems. In dealing with speech problems; instead of avoiding, we have to speak more to improve our communication and constant drill plays an important role. Even for stammerers, they do not have any alternative other than boldly facing the speaking situations to gain confidence. Constant drill makes speech better and perfect.

Literary merits and comparative analogies in Kural: In addition to scientific ideas, Kural also provides a lot of moral values with sophisticated literary excellence. It is amazing to note that giving a meritorious life to a concept in two lines with just seven words is not that easy. In many of the Kurals, the analogy given by him for different expressions is not only apt, but also great and wonderful. The following are few examples for the poetic skill of Thiruvalluvar. In Kural 100, he compares the use of pleasant words to that of ripe fruits and harsh words to that of unripe fruits. In Kural 66, his expression of placing the babbling speech in a much higher order than that of the sweet music of a flute is great and marvelous. By giving Stork as a single analogy, poem 490 expresses all about the merit of three great qualities of patience, utilizing the appropriate timing for an activity, achieving success without any miss or failure. Kural 872 places an administrator with the skill of good speech over and above the warrior. The exact and apt rhyming word in Tamil for both the warrior and administrator with good speech skills tells about the great literary skill of Thiruvalluvar. Kural 196 gives a good analogy of chaff to that of a person who

continuously uses unwanted empty words. Kural 650 compares a person without teaching skills to that of flowers without any fragrance. Kural 959 compares the quality of a person's speech skills to that of a sprouting seed. Poem 129 compares and tells that the insults caused by the harsh words are much worse than that of burns wounds. Even in the first Kural No: 1, he gives an analogy of alphabet which is a part of language for invoking God. Kural 392 indicates that both numbers and letters are like two eyes of living organisms. Kural 1253, 1203, 1312, 1317 and 1318 are explained with the involuntary activity of sneezing. Kural 783 gives the analogy of reading good books with developing friendly relationship with noble persons. In poem 475, the damage and fate of the overload in a cart is compared with hyper function and abuse of any object or activity. Kural 476 compares the evil effects of exceeding the permitted limit, to that of climbing up a branch of the tree beyond limits. This poem makes us to analyse and understand our strength and limitations. Kural 576 compares the people without kindness to that of trees. In 1302, salt is given analogy for that of optimum feigned dislike. Poem 25 gives the act of Lord Indra as cited in Hindu mythology, for not controlling ones senses. Kural 126 gives an analogy of controlling senses to that of a tortoise. Kural 706 compares the mirror with that of the face which indicates one's mind. In Kural 151, tolerance to bear the insults and its pain is compared to that of earth which bears the digging of it. Kural 412 compares the appetite for food in lower priority to that of appetite for Knowledge through listening. Kural 415 compares the good counseling skill to that of having a staff (supportive stick) in a slippery floor. Poem 65 compares the happiness derived from listening of sounds to that of happiness derived out of touching and stroking the children. Kural 413 compares the persons who can hear the sounds to those of divine forces. These above said poems confirm the first hypothesis and proves it to be true. It

can be concluded that Thirukkural contained a lot of scientific information and facts. It is amazing to know that Thiruvalluvar had a great knowledge about the science and value of Speech, Language, Hearing and other Sensory inputs. His literary skills added beauty and aesthetics to express his superior wisdom.

Thiruvalluvar as a scientist of moral and ethical sciences: The statement of second hypothesis that ‘these deserving scientific facts given in Thirukkural have not been brought to limelight for our developmental growth’ is found to be true. Our modern science has dealt with only the basic concepts of physical, psychosocial, and educational aspects of Speech and Hearing science. They give a lot of details about medical, linguistic, and technical aspects. For example the developmental stages of speech are given as Birth cry, Reflexive Vocalization, Babbling, Lalling, Echolalia, and True speech. Linguistically speech and language are explained in terms of Phonology, Syntax, Semantics and Pragmatics. Educationally they deal with Reading, Writing etc and numbers form the technical base. But Kural has gone one step extra to give additional information on ethical / moral values and virtues in communication. Since all these amalgamated information are valuable masterpieces for total development of human life and the society, Valluvar has given a wholistic account of Speech, Language, Hearing, and other Sensory stimulus inputs in communication science. He not only gave valuable information on communication; but by adding moral values and ethics, he focused on meaningful communication. He was probably a highly acclaimed scientist of moral and ethical science. Because of the fact that many of his concepts are abstract in nature, not many people ventured to enter his wider domain and broader spectrum of thought. In spite of this merit in Thirukkural, it is really sad that no known attempt have been made till now to bring it in to the realm and purview of modern research. The results of familiarity studies reveal that out of

124 Kurals 101 poems which accounted for 81.45%, had less than 50% of familiarity ratings. It is sad that Speech Pathologists and Audiologists scored more of ‘not familiar’ scores than ‘familiar’ scores on these Thirukkurals. Till now, no known research on Thirukkural and Speech and Hearing science has been done. This indicates that many of the Speech and Hearing related Kural poems are not brought to limelight. So, it can be safely said that many of these Kural poems and its values are unexplored or underexplored by modern Speech and Hearing science. So, to make Thirukkural known to the scientific community in general and Speech and Hearing scientists in particular, an attempt is made here by this present study.

Demographic details from surveys: This study had also focused on finding out the familiarity and relevance of various Kurals by an objective survey method. To get the generalized opinion from a cross section of people, ten different groups/ categories of individuals were used for this survey. The collected demographic data from both the surveys on familiarity and relevance reveal the following details:

1) The familiarity study included forty seven respondents with twenty nine males (61.70%) and eighteen females (38.30%). The age range of respondents was from twenty years to eighty years with a mean age of 44.52 years. The age of males ranged from twenty one years to eighty years with an average of 49.18 years. The age of females ranged from twenty years to sixty two years with an average of 39.87 years. In total, 82.98 % of respondents were from the age range of twenty one years to sixty years.

   In the survey on relevance study, there were one hundred and twelve respondents with forty one males (36.61%) and seventy one females (63.39%). The age range of subjects for the total group was from eighteen years to eighty three years with a mean value of 42.4 years. Male’s age range was the same as

that of total respondents and the average age for them was 44.7 years. Female respondent's age ranged from nineteen to seventy seven years with a mean value of 40.1 years. In total, 82.14% of subjects were from the age range of twenty one years to sixty years.

There were more subjects in relevance survey study than familiarity study. The ratio of males and females were quite opposite in both the surveys. Since more than 80% of subjects in both surveys were in productive age range, the scores can be taken as reliable.

2) Though S.S.L.C. was minimum qualification, 82.98% of respondents of familiarity study and 81.25% respondents of relevance study had college education. The advanced educational qualification of respondents in both the surveys also puts the reliability of study in an advantageous better place.

3) In both the surveys, the subjects had a wide range of jobs like government or private jobs, self employments like business etc. Pensioners, Housewives, and Students were also included. 10.6% of subjects of familiarity study and 12.5% of subjects of relevance study had government employment. Including the pensioners, the government employees accounted to 34% in familiarity study and 23.21% in relevance study. The 19.15% of subjects in familiarity study and 16.97% in relevance study were from the combined group which included Self-employed, and Business and Agriculture. In short, the Private Job holders, Business and Self employed group accounted for 42.55% of respondents in familiarity study and 46.43% of respondents in relevance study.

4) Knowledge of Tamil language alone was taken into account and no discrimination was made for the geographical region.

5) Only 10.64% of subjects in familiarity study and 1.79% of subjects in relevance study stated that they were not familiar about Thirukkural. Probably they meant that they were not proficient in Thirukkural. Because all the students of Tamil subject up to the level of S.S.L.C. would have definitely had Thirukkural poems in their studies.

6) 68.29% of respondents in familiarity study and 55.17% of the respondents in relevance study said that they learned Kural as part of academic curriculam. Special interest accounted to 12.20% in familiarity study and 8.05% in relevance study. Nearly 5 % of the respondents in both surveys stated that they learned because of both academic training and special interest.

7) Though all had known Tamil, only 57.45% in familiarity study and 62.5% in relevance study had Tamil as their mother-tongue. Other Dravidian languages were the mother tongue for majority of other subjects. All the subjects knew more than one language and some had trilingual and multilingual exposure.

8) In school level, about 65% of subjects had education in Tamil medium and majority of the rest in English medium. In college level only about 5% of subjects had Tamil as medium of instruction, whereas majority of the rest of the respondents had English as medium of instruction. Study results indicate that at least in the previous generation, majority of public had their basic education in Tamil medium and preferred or forced to have English as the

medium of instruction in higher education. Probably then there was no choice for selection of language other than English as the medium of instruction for higher studies

9) About 13% of respondents in both the surveys had Tamil as second language up to the level of X standard and about 30% of respondents had Tamil as second language up to the level of +2 courses. More than 30% of subjects had Tamil as second language up to college level.

Familiarity Score Details: The details of familiarity scores for the selected one hundred and twenty four Thirukkurals are given herewith for reference.

1) The result reveals that there is a differential rating scores of familiarity for each of these Kurals and it ranged from 4.25% to 100%. On an average, 31.61% of kurals were rated as 'more familiar' and 21.15% of them as 'less familiar' and both together accounted to the positive scores with 52.76% of familiarity of Kural. 41.12% of Kurals were rated as 'not familiar'.

2) In comparing different groups for Kural familiarity, the individual group of Teachers of language subjects had a maximum familiarity score of 83.06% which may be attributed to their strong academic knowledge and professional activities. The individual group of Medical Specialists scored the minimum amount of 'familiarity' scores with 39.91% results and immediately followed by the next group of Speech Pathologists and Audiologists with 42.57 % familiarity scores. This low familiarity scores found in these groups may be due to the fact that in pre-professional and

professional courses, the learning of language subjects are not taken that seriously as that of core subjects. In many of professional courses language subjects are not taught to students.

3) Though Valluvar has allotted two exclusive chapters for the topics of Speech (சொல்வன்மை) and also for Hearing (கேள்வி), the percentage of "more familiar" rating score was the lowest for the group of Speech Pathologists and Audiologists. It may be due to the fact that these kurals do not deal more with the conventional pathological conditions and hence skipped their attention. In all categories other than Language teachers and Speech Pathologists and Audiologists, the score of 'less familiar' is almost similar. Only in three categories of Special Educators, Teachers of Language subjects, and College students the percentage of Kural familiarity exceeded the percentage of the non familiarity of Kurals. While comparing the groups, relatively high score of unanswered column about the familiarity status is noticed in the category of Special Educators followed by Teachers of language subjects. The subjects in the category of Medical Specialists and Individuals with disabilities answered all the questions without any omission.

4) Out of total 124 Kurals, only 23 Kurals enjoyed 51% and above familiarity scores. In these twenty three Kurals eight had familiarity ratings between 51% to58%, and the rest of fifteen had familiarity ratings above 74%. In these twenty three Kurals thirteen are from the division of Virtue (அறம்); and the rest of ten are from the division of Wealth (பொருள்). Out of one hundred and twenty four Kurals, one hundred and one poems which

accounted for 81.45% had less than 50% of familiarity ratings. This again indicates that many of the Kurals related to speech and hearing subject are not familiar and highlighted.

Since Hypotheis No: 3 is proved to be wrong, further steps on familiarizing Kurals need to be undertaken to highlight its merit.

Relevance Score details: The fourth hypothesis on relevance status was tested. Totally sixteen applicable Kurals with above average familiarity scores were selected for a second survey. The data on relevance scores were analyzed and the following results are provided.

1) In total, 86.38% of respondents gave a positive score of relevance for the familiar Kurals which included 49.77% as 'strongly relevant' and 36.61% as 'relevant' scores. The highest positive score of 92.19% was given by the category of 'Individuals with disabilities' and the lowest positive score of 81.25% was given by the category of 'Teachers of language subjects'.

2) Only 6.3% of subjects gave negative relevance scores and Individuals with disabilities did not give any negative relevance score. Maximum negative relevance score of 10.94% was given by Teachers of Language subjects.

3) Kural 127*(யாகாவா ராயினும் நாகாக்க...)* attracted highest positive relevance score of 95.53% whereas Kural 412(*செவிக்குண வில்லாத போழ்து)* had the lowest positive relevance score of 65.18%.

4) For the undecided response, Special Educators had scored the minimum of 2.78% whereas the group of Parents and family members of disabled gave the maximum score of 8.93%. Kural 126 (*ஒருமையுள் ஆமைபோல்)* had attracted the highest 'undecided' response score of 19.64%.

5) Only 0.67 % of people failed to respond to few kurals which may be due to intentional avoidance or by mistake.

In short, it is evidently indicated that the majority opinion on the status of Thirukkural concepts are still relevant for today's healthy life. All the Kurals enjoyed differential level of relevance status for present day healthy life. The stated hypothesis No: 4 is proved to be wrong.

Thirukkural withstood the test of time: The fifth hypothesis that the concepts of Speech, Language, Hearing, and other Sensory inputs as explained by Thiruvalluvar have withstood the test of time and they are highly relevant to today's healthy life is found to be true. The results of survey have revealed that 86.38% (49.77% strongly relevant and 36.61% relevant) of cross section of modern population has indicated that Thirukkural is still relevant for today's healthy life. A Strong relevance is attributed to many Thirukkurals like Kural 127 (யாகாவார் ஆயினும்), Kural 129 (தீயினால் சுட்டபுண்), Kural 664 (சொல்லுதல் யார்க்கும்), Kural 414 (கற்றிலன் ஆயினும் கேட்க) etc. Though some of these Kurals are considered to be extremely relevant for today's healthy life, others have given varying percentage of relevance judgement scores. The possibility of such a deviation is definitely possible and was also expressed by others like Kulandaiswamy. The following are the few examples where the relevance status derived from our study is in relatively low profile. Kural Nos: 412 (செவிக்குணவு இல்லாத), 126 (ஒருமையுள் ஆமைபோல),

392 (எண்எண்ப ஏனை), and 28 (நிறைமொழி மாந்தர்) etc are coming as examples in this category. Even in all these Kurals where the status of relevance is questioned and disputed, we cannot set them all aside as obsolete and irrelevant. Though there may be variations in relevance status across different Kurals, none of them can be stated as totally irrelevant.

Interesting search: Because of interest, an explorative search was made on the expressions given in Kural 420 (செவியின் சுவையுணரா…..), which questions the existence and continued living of people with hearing impairment. The possible reason for this conclusion of Valluvar was analysed. So, a search was made to find out the status of such people with hearing disabilities in different cultures and civilizations during the ancient period. It was amazingly evident that the ideas, concepts, and findings about this problem which was prevalent at that period of time in various other civilizations like Greece, Egypt, Rome and Europe were similar to that of Thiruvalluvar. So, in conclusion it could be said that Valluvar's concept of life of a person with hearing impairment at that point of time was almost the same as that of other contemporary society and in cultures which lived elsewhere on the earth. This indicates that we have to carefully view all the concepts of Valluvar in the background of that particular reference period. We can infer that he would have definitely foreseen some progress and advancement in life-skills of people and future developmental growth. He also would have expected some supportive or assistive materials in the few decades to come. But it would have been an impossible task for Thiruvalluvar to predict all the prospective scientific and technological development after few decades of his life. When we look back at the developments in Science and Technology over a period of time from the days of Valluvar, it is well accepted that we are the best beneficiaries and in the peak of advanced developments. It has not

only given us good health, comfort, knowledge and longevity; but also has definitely reduced the impact of disability or illness on human beings. The advances in modern science have definitely reduced the sufferings of disabled population and helped this group to improve their skill or lifestyle. But, in spite of enormous growth in various fields, even now we are not able to alleviate all the problems of the disability group and eliminate the adverse impact it has impinged on the individual and the family. The deficiency in structure or function is not fully compensated by available medical, surgical, rehabilitative, educational, vocational, legal and social procedures. Still the life of people with disabilities has not fully changed to normal or even to satisfactory level of standards. Hence the Kural concepts still have a good relevance for today's happy life. These facts indicate that even after 2000 years of its genesis; the ideas of Valluvar are valuable and useful to maintain a healthy life. So, Thirukkural concepts of Speech, Language, Hearing, and other Sensory inputs have withstood the test of time to prove its merit. Thus the hypothesis No: 5 is proved and found to be true.

Kural concepts help us to face challenges: The sixth hypothesis is found to be true and can be said that by following Thiruvalluvar's concepts of Speech, Language, Hearing, and other Sensory inputs, even the difficult challenges in our life can be met. Thus Kural helps to achieve success and reach the greater heights of skill achievement with empowerment. Thiruvalluvar has given a lot of conceptual ideas in Speech, Language, Hearing and other Sensory inputs which will enrich any person or a group with positive developments. With a bit of positive approach, all these concepts can be followed in our life and will help in achieving the progress. These concepts will help the entire community to meet even difficult challenges and situations arising at different levels, so that peace and harmony can be maintained. All these kural instructions will ensure the achievement of courage and skill

empowerment in us. The life of past leaders like Abraham Lincoln, Mahathma Gandhi, Martin Luther King Jr., Nelson Mandela, Mother Therasa and Abdul Kalam A.P.J. are few of the best examples for it. When we look back their successful life, we can understand how the moral values cited in Kural helped them to overcome their difficulties, problems, and challenges.

Versatality of Kural: Though all these Kural information and guidelines are essential for our total development, many of the modern scientists had not dared to touch all these abstract philosophical concepts like moral values and ethical aspects. Modern authors have focused their attention only on concrete aspects.Whereas Thiruvalluvar had also focused on all higher abstract domains of moral and ethical virtues in it.Though Valluvar had explained about the basic concepts of communication in Thirukkural, his priority was those abstract aspects probably indicating the need of that time and possibly forever. He as an advocate of moral and ethical sciences had a broader outlook, focused on the welfare of individual as a whole and the community at large. The medical aspects of the given topics in Speech and Hearing science were expressed in Kurals 335, 959, 534, 27, 354, 1261, 9, 411, 412, 414, 419, 65, 413, 51 and 1102. Psychosocial aspects were cited in following Thirukkurals: 1198, 1121, 953, 198, 872, 650, 292, 291, 185, 183, 182, 824, 28, 1 643 , 642 , 664, 621, 1302 , 1199 , 417 , 1101, 1275, 151, 159 , 160, 420 and 415. The linguistic aspects of our topics were given in Kural 66, 649, 191, 721, 645, 490, 644, 714, 715, 711, 712, 713, 192, 193, 696, 647, 641, 1, 648, 1100, 1274, 1271, 701, 1253, 1203, 1312, 1317, 1318, 271, 1040, 683 and 783. The technical aspects of our topics were given in Kural Nos: 392, 514, 475, 479, 480, 476 and 1228. The political aspects of our topics were given in Kural Nos: 387, 646, 386, 567, 568, 635, 1 682, 564, 703, 706, 389, 95, 98, 97, 525, 100,

99, 826, 127, 694, 194, 195, 196, 197, 181, 184, 139, 1057, 199, 200, 187, 129, 35, 128, 119, 575, 576, 24, 25, 126, 6, 343, 416 and 418.

The need of Kural teachings for a meaningful life: With this treasure of ideas, Thiruvalluvar has shown a golden path for progress at all levels from individual achievement to international harmony. So, by systematically following all these useful Kural concepts including the philosophical considerations; we can definitely make our life meaningful, better, and worth living. Even in critical situations, we will be equipped to face any threats including difficult challenges. With Kural ideas, we will be well equipped with empowerment and courage to meet any future challenging needs of our life.

In order to achieve this goal of reaching greater heights in our life with all virtues and values, an enhanced academic teaching of these morals right from young age is needed. An increased awareness of Kural by all sections of people will be the growth oriented useful target. Hence, it should be included in the syllabus of moral science both at school and in college level. Since Thirukkural contain lots of scientific concepts, all these ideas should be incorporated in the relevant subject topics and disciplines of higher studies of arts and science courses at all levels of academic instructions. Such studies of Thirukkural will definitely enhance inter-disciplinary thinking and in improving academic, research, professional and ethical knowledge. If all his instructions are strictly followed in educational institutions, administrative and diplomatic set-ups, work places, family set-ups and in general community; excellance in skill achievements can be possible in our life. That progress will help in enhancing our personal and public relations. Nowadays on knowing the strength and merit of Thirukkural, Government agencies and also many volunteers like Indian Parlimentarion Tharun Vijay have taken special interest in propagating Kural values.

Even the familiar Kurals which are known well to the public and considered to be relevant for our modern healthy life are not well utilized in real practice or in correct perspective and for the betterment of mankind. This is indicated by the fact that only some of the Kurals concerning Speech and Hearing are familiar to the population studied. The present day scientific community, academicians, researchers, and public have not fully utilized the knowledge, wisdom, and the teachings of Thiruvalluvar. Since our contemporary society and future generation require many more good leaders to guide as role models; Thirukkural teaching can be a good answer for this targeted aim and subsequent achievement.

Kural shows the royal road for a healthy life: The seventh hypothesis statement that Thirukkural helps to show the public a divine channel for a healthy, peaceful, and happy life with much better human behavior and public relations is found to be true. This study has shown that Thirukkural has a lot of scientific facts and varied knowledge about Speech and Hearing science. His views are found to be in agreement with many of modern scientific studies. These ancestral values show the intellectual wisdom of ancient India in general and the Tamil community in particular. Since Valluvar's conceptual ideas are mainly based on human activities, Kural views will help to improve personal and community health, academic knowledge, vocational skills, socio-economic growth, interpersonal relationship, and the general life of all citizens. In short, his instructions will help in achieving human excellence and for reaching the peaceful growth without any discrimination. Though Thirukkural reflects the cultural heritage of ancient Tamil community; it has an international outlook, global perspective, and universal application.

Our findings support that Valluvar's conceptual Kurals are still relevant for our healthy life. Only few Kurals can be disputed and even those do not have any

great discrepancies or variations. Even in disputed relevance conditions like in Kural 420, still it has significant impact for present day living style. Though the present day governments and human right advocates view sympathetically on disability and rehabilitation based on democratic standards; the problems faced by the afflicted persons, family members and their associates are not fully eliminated. The difficulties still remain in terms of exhibiting their skill excellence, adaptation or compensation for their loss of function.The problems may be exhibited in mobility, in achieving good educational /vocational/ and economic standards, in developing social acceptance, in gaining recognition and in establishing community integration etc. In our study, no Kural is rejected completely for its relevance status. This indicates that real expressions given in Thirukkral cannot be said as totally wrong for today's healthy life. But we had many Kurals with 100% relevance score. So, it can be safely said that his ideas are still applicable for a healthy life. Since all these instructional ideas of Valluvar are focused on continuous and ongoing human activity, they are not only relevant for today but also for the future. It will be required to be followed as long as human beings exist.

Valluvar's concepts are general in nature and avoid the use of specific names of God, country or place, language, etc. For instance, he devotes a whole chapter to the importance of speech, but would not mention the name of any language including his own mother tongue 'Tamil'. A better knowledge of Kural is expected to bring excellence in our communication skills. This in turn will enhance education, administration, management and inter personal relations. Since Kural has a universal application, its messages need to be taken to the masses of the world for a peaceful and harmonious existence.

This study indicates that Thirukkural ideas are not 'very familiar' and our community has not utilized his wisdom to the full extent. But, our survey study on relevance has shown that they are still relevant for all of our productive developmental works. This warrants a need to familiarize all these Kurals, so that the future generation will know better about the merits and values of Speech and Hearing concepts. Valluvar has definitely shown a divine channel with royal roads for development, peace, prosperity and glory which will definitely help to achieve an integrated happy, harmonious, and healthy life. A sincere attempt to follow his ideals will make this world, a better place to live and enjoy. Since Thirukkural gives international outlook and perspective as a good source of information for development, Kural needs to be highlighted and utilised at the global level. A good knowledge of Thirukkural can definitely help us to form a universal religion which will send the strong message of humanism, brotherhood, adjustment, adaptation, harmony, welfare, growth, peace and prosperity. Hence, it can be safely said that Thirukkural is a living literature and is relevant for today and forever. This study also highlights the scope for further research including the concept of Medical Humanities as said by Hemachandran Karah (2005:10). So it can very well be said that Thirukkural has shown a royal road for a healthy, peaceful, and happy life.

Conclusion:

1) Thiruvalluvar with vast knowledge about varied topics wrote 1330 Thirukkurals in Tamil about 2000 years back. Kurals in concise couplet forms expressed valuable facts of life with literary excellence.

2) Thirukkural included one hundred and twenty five couplet poems on Speech, Language, Hearing and other Sensory inputs. Since he gave information on

virtues, ethics and moral values in addition to basics; he can be considered as an acclaimed scientist of moral and ethical sciences. The familiarity study reveals that these Kurals are not very familiar and have not been brought to limelight**.** Kurals on these subjects and its values are unexplored or underexplored by modern science.

3) The high relevance status of selected familiar Kurals confirms that they are still relevant for today's healthy life and Kural has withstood the test of time. Though few Kurals are in dispute, a retrospective search about this problem reveal that other contemporary cultures on earth at that time also had similar views as that of Thiruvalluvar. Though the relevance status might have changed now, Kural still enjoys good relevance for today's healthy life.

4) Thirukkural can help in skill excellence and empowerment to meet even difficult challenges. Many leaders, guides and role models who followed Kural ideas had achieved success and reached greater heights. So, for the benefit of humanity; Thirukkural teachings should be considered at all levels. Thiruvalluvar has shown avenues and royal roads for success, happiness, healthy relations, peace and harmony.

Recommendations: The following are considered as limitations and few recommendations are given herewith.

1. Sampling procedures for familiarity and relevance study with more number of subjects and, more categories of people are desirable.

2. A wider geographical area need to be covered for survey. To avoid getting biased results, non Tamil speaking population including foreign nationals has to be covered on Thirukkural study.
3. Adding interview method after survey will give specific and better response from the respondents.
4. Just like communication science, other subject topics available in Thirukkural also need to be taken. Even in communication, specific topics like, speech, language and hearing can be taken up separately.
5. Since many of these Kurals are interrelated and connected to different subject topics, a comprehensive multi-disciplinary integrated study approach will yield still better results.
6. The reliability of subject's answer may be improved by defining the range of percentage scores, for each category of familiarity and relevance responses.
7. Kural message need to be taken to respective academic institutions, concerned departments in Governmental and non Governmental establishments, diplomatic channels and international forums etc.
8. A thrust on public education about Kural values is needed at international level to achieve universal harmony and peace.
9. Other literary works in Tamil also may be taken up for similar study.

BIBLIOGRAPHY

1. Aasaan G.V.K. 2008 *Thiruvalluvar on Learning, Knowledge and wisdom.* Poongundran Pathippagam, Coimbatore.
2. Alagesan S. 2011 *VA.VU.C-in Tholkaappiam Ezhuttathikaram.* Sudha Pathippagam, Tuticorin.
3. Alagesan S 2015 *Ilakkana Aayvukkovai.* Tholkappiar Mandram, Nagarkoil.
4. Alan G.Kamhi and Hugh W. Catts 1989 *Reading Disabilties- A developmental Language Perspective.* A College Hill pub. Little, Boston.
5. Arnold Gesell, Franes L.Ilg, Janet Learned, and Loui B.Ames. 1942 *Infant and Child in the culture of Today* Harper and Brothers Publishers, New York.
6. Arun Banik and Tanaji S. Pawar 2005 Study of Auditory response of children with hearing impairment usingindividual hearing aid classroom amplification. *Journal of R.C.I. Vol I.No:2.* Delhi.
7. Asha Yathiraj and Kavitha E.Mascarenhas 2004 Audiological profile of Children with suspected Auditory processing Disorders. Journal of ISHA.Vol 18. Mysore.
8. Avinashilingam T.S 1975 *Life and sayings of Sri Ramakrishna.* Sri Ramakrishna Mission Vidyalaya. Coimbatore.
9. AvvaiAzhagammai M.P 1997 *Speech and hearing as Thiruvalluvar sees.* Souvenir of annual conference of ISHA Coimbatore.
10. Bell Alexander Graham 1969 *Memoir upon the formation of a deaf variety of the human race.* Alexander Graham Bell association of Deaf Pub. Washington D C.

11.	Bill R.Gearhart and Carol J.Gearh	1989	*Learning Disabilities Educational strategies* (5th ed). Merrill Publishing Company. Columbus, Ohio.
12.	Carol K.Sigelman and David R.Shaffer	1995	*Life-Span Human development* (2nd Ed.) Brooks Cole Publishing Company. California.
13.	Charles Van Riper,	1982	*The nature of Stuttering*. Prentice – Hall, Inc Publications. New Jersy.
14.	Chidambaram Ramalinga Adigal	1973	*ChennaiKandhakottappugazhmaalai*. Thennindhiya SaivaSiddhantha Noorpadhippu kazhagam.Chennai.
15.	Cynthia L Jones et al	2005	*Aphasia – a guide for the patient an family* Interactive Therapeutics, Inc. Stow–Ohio.
16.	Daniel P.Hallahan and James M.Kauffman	1988	*Exceptional children.Introduction to Special education.* Prentice Hall Pub, New Jersey.
17.	David Crystal and Rosemary Varley	1995	*Introduction to Language Pathology*. (3rd Ed) A.I.T.B.S.Publishers Delhi.
18.	David Werner	1994	*Where there is no Doctor*. Voluntary Health Association of India, New Delhi.
19.	DeenaK.Bernstein and EllenmorrisTiegermanl	1989	*.Language and Communication Disorders in Children.*(2nd Ed) .MerrilPub.Co., Columbus.
20.	Donna E.Norton	1985	*The effective teaching of Language Arts*. (2nd Ed) Charles E.Merrill Publishing Company, Columbus.
21.	Eldon E. Ekwall and James L.Shanker	1983	*.Diagnosis and Remediation of the disabled reader*. Allyn and Bacon, Inc Boston.
22.	Ellen R. Browning	1983	*Teaching students with severe emotional and Learning Impairments.* Allyn and Bacon Publications, Boston.
23.	Gearheart B.R.	1973	*Learning Disabilities Educational strategies.* The C.V. Mosby Company, Saint Louis.
24.	George Yule.	1996	*The study of language An Introduction.* Cambridge University Press, Cambridge.

25.	Gramek M	1989	*Diseases in Ancient Greek world.* Johns Hopkins University press. *Baltimore*.
26.	Gummati Sharmila Mandanna	1991	Receptive Vocabulary Testing in Cerebral Palsied Population. *Research at AIISH* Vol. III. *AIISH Publications,* Mysore.
27.	Guy R.Lefrancois	1986	*Of Children An introduction to Child development*.(5th Ed.) Wadsworth Publishing Company.Belmont. California.
28.	Hallowell Davis and Richard Silverman S.	1970	*Hearing and Deafness*.(3rd Ed.). Holt, Rinehart and Winston Pub., New York.
29.	Hemachandran Karah.	2015 Sep22	*For an inclusive humanities pedagogy*.The Hindu Newspaper, Coimbatore.
30.	Howard S. Friedman., Miriam W.Schustack	2006	*Personality Classic theories and modern research.2nd Ed.* Dorling Kindersley (India) Pvt. Ltd., New Delhi.
31.	Jack Katz	1985	*Handbook of Clinical Audiology* (3rdEd). Williams &Wilkins Baltimore.
32.	James Allen	1968	*Morning and Evening thoughts with Kural couplets*. The South India Saiva Siddhanta works pub. Society, Tirunelveli.
33.	Janet Lees and Shelagh Urwin	1995	*Children with Language Disorders.* AITBS Pub., Delhi.
34.	John Ballantyne Martin M.C., and Antony Martin	1993	*Deafness*. (5th Ed). A.I.T.B.S.Pub, NewDelhi.
35.	Kandhaswamy Mudhaliyar T.S.	1939	*Thiruvalluva Nayanar arulicheitha ThirukkuralMoolamum Parimelazhagaruraiyum.* The south India Saiva Siddhanta works, Tirunelveli.
36.	Kapali Sastry T.V	1983	*Lights on the Veda*. Dipti Pub. Pondicherry.

37.	Kothari C.R.	2004	*Research methodology - methods and techniques.* New Age International (P) Ltd, pub, NewDelhi.
38.	Krishna Mohan and Meera Banerji	1990	*Developing Communication Skills.* Macmillan India Ltd., New Delhi.
39.	Kulandaiswamy V.C	2002	*The Immortal Kural.* BharatiyaVidya Bhavan, Mumbai.
40.	Lyndall Rich H	1982	*Disturbed Students. Characteristics and Educational Strategies.* Pro-ed, Ausin.Texas.
41.	Maheshwari M .C. and Singh K.K.	2004	*Stroke and Rehabilitation,* National Book Trust, India. New Delhi.
42.	Margaret Lahey	1988	*Language Disorders and Language Development*. Macmillan Publishing Co., New York.
43.	Marilyn Segal. Wendy Masi and Roni Leiderman	2001	*.In time and with love.* Newmarket Press, New York.
44.	Mildred A.Dawson., Marian Zollinger., Ardell Elwell M., and Eric W.Johnson.	1975	*Language for daily use*.California state department of Education, Sacramento.
45.	Mildred Freburg Berry	1980	*Teaching Linguistically Handicapped Children.*Prentice-Hall Pub., Englewood Cliffs, New Jerssy.
46.	Mittal S.R.,Shobalaxmia Sahu.	2005	Effectiveness of Audio-tactile material in promoting cognitive and language development in visually impaired children. *Journal of Rehabilitation council of India* Vol I No: 2. Delhi.
47.	Murugan V.	2009	*Thirukkural in English,* Arivup Pathippagam, Chennai.
48.	Muthushanmugam	2012	*Ikkaala Mozhiyiyal.* Mullai Nilayam, Chennai.

49.	Narayana Rao S	2007	Counselling and Guidance (2nd Ed). Tata McGraw-Hill Pub. Co, New Delhi.
50.	Narayanaveluppillai M	1992	*Thirukkural*.Narmadha Pathippagam, Chennai.
51.	Norman J. Lass. , Leija V. McRenolds. , Jerry L. Northern. , David E. Yoder.	1988	*H.B. of Speech- Language Pathology and Audiology.* B.C.Decker Inc, Philadelphia.
52.	Paul Henry Mussen	1960	*H.B. of Research Methods in Child Development*. John Wiley & sons Inc., New York.
53.	Peter J.Valletutti. , Michael Bender.	1985	*Teaching the moderately and severely Handicapped.-Volume 2.*(2nd Ed). Pro.Ed. Austin, Texas.
54.	Philip Cartwright G., Carol A. Cartwright., and Marjorie E. Ward	1985	*Educating Special Learners*. (2nd Ed.). Wadsworth Publications Company, Belmont, California.
55.	Pope G. U., Drew W. H.,John Lazaruz	2010	*Thirukkural Tamil English version.* Kumaran Pathippagam, Chennai.
56.	Pramod Sravan	2015 Sep22	*The beauty of the concept of mathematics*.The Hindu ewspaper. Kasthuri & Sons Ltd. Coimbatore
57.	Premakumari C.B	1992	*The developmental nature of whisper in children.* Research at AIISH.Vol.III. AIISH, Mysore.
58.	Rajagopalchari C.	1981	*Kural-The great book of Tiru-Valluvar* Bharatiya Vidya Bhavan, Bombay.
59.	Rajaram M.	2009	Thirukkural Pearls of Inspiration, Rupa & Co, New Delhi.

60.	Raja Yogi B.K. Jagdish Chander	1985	*Eternal Drama of Soul, Matter and God. Part-I* Prajapita BrahmaKumaris Ishwariya VishvaVidyalaya, Delhi.
61.	Raymond H.Colton. , Janina K.Casper. Minoru Hirano.	1990	*Understanding Voice Problems.* Williams and Wilkins, Baltimore.
62.	Richard L.Strub and F.William Black	1995	*The Mental Status Examination in Neurology* (3rd Ed). Jaypee Brothers, NewDelhi.
63.	Roberta Chapey	1986	*Language intervention strategies in Adult Aphasia* (2nd Ed.). Williams and Wilkins, Baltimore.
64.	Ronald L.Schow., and Michael A.Nerbonne	1980	*Introduction to Aural Rehabilitation.* Pro. Ed, Austin, Texas.
65.	Geetha Mukuntan	1999	*D.S.E. (H.I.) Manual-R.C.I.* Kanishka Publishers, NewDelhi.
66.	Sami.Chidhambaranar	1959	*Thirukkural Porul Vilakam.* Star Pirasuram, Chennai.
67.	Samuel A. Kirk.	1970	*Educating Exceptional Children* Oxford & IBH Publishing Co. New Delhi.
68.	Sarthak Saraswat.	2015 July- 20	*The Philosophical Advantage*. Global Buzz Column. The Hindu Newspaper, Kasthuri & Sons, Coimbatore.
69.	Savithri S.R	1978	*Speech & Hearing Science in ancient India: A survey of Sanskrit Literature.* Research at A.I.I.S.H., Vol. I. A.I.I.S.H.Publishers, Mysore.
70.	Seenivasan R.,	2010	*Mozhiyiyal.* Saradha Pathippagam, Chennai.
71.	Shelley E.Taylor	2006	*Health Psychology* (6th Ed.). Tata McGraw – Hill Pub. Co. New Delhi.

72.	Sri Aurobindo	2007	*The Human Journey* Sri Mira Trust. Pudhucherry .
73.	Subramanian S.V	2005	*Tholkaappiam in English.Content and cultural translation* .Meyyappan Pathippagam, Chidambaram.
74.	Sujatha	2005	*Thirukural Puthiya Urai.* (5th Ed.). Uyirmmai Pathippagam, Chennai.
75.	Susan Schaller	1992.	A man without words. *American journal of Psychology:* 105.
76.	Swami Srikantananda	2005	*The Intelligent way to Yoga*. Sri Ramakrish Math, Chennai.
77.	Swami Vivekanada	2009	*Selections from the complete works of Swami Vivekanada.* Advaita Ashrama, Kolkata.
78.	Thayumaanavar	1980	*Sri Thaumaana Swamy Paadalgal*. Sri Ramakrishna thapovanam Thirupparayathurai, Trichy.
79.	Thiruvarutprakasa Vallalar.	1977	*Theivamanimalai.* Sri Muthukumaraswamy Devasthanam Madras.
80.	Usha Raman	2013 Aug19	*The Kindness quotient.* Education Plus. The Hindu Newspaper. Kasthuri & Sons Ltd, Coimbatore.
81.	Varadharasanar M	2014	*Thirukkural Thelivurai.,* The South India Saiva Siddhantha Works Publishing society, Chennai.
82.	Venetta Lampropoulou	1995	*The history of Deaf Education in Greece.In The Deaf Way 1995,* Gallaudet University, Washington, D.C

WEBSITES:

www.autismindex.com/Therapies/Therapy_Key_Word_Site_Map/sens - 18k.

B.B.C. Horizon special program *Total Isolation.L*ink retrieved on 14-09-2015 from http://www.bbc.co.uk/sn/tvradio/programmes/horizon/broadband/tx/isolation/

www.educarer.com

Erting J. Carol, Robert C.Johnson, Dorothy L.Smith, and Bruce D.Snider 1995. 'The deaf way'. Retrieved from http://gupress.gallaudet.edu/reviews/DWreview.html on 16-10-2015

http://gupress.gallaudet.edu/reviews/DWreview.html

Hart L.G. 2000 Status of Tamil as a Classical Language.Retrieved on 16-10-2014 from http://www.tamilculturewaterloo.org/classicallanguage.htm

Jacqueline Chinappi. 2012 *The Significance of Sensory Stimulation in Infant Brain Development*. Retrieved on 8-7-15 from http://www.brighthubeducation.com/infant-development-learning/35203-sensory-stimulation-for.

James Berger. (2003). *The Story of My Life- Helen Keller.The restored Edition*.

Janet Domen (2006).How smart is your Baby? Develop and nurture your newborns full potential.Retrieved from http://www.amazon.it/How-Smart-Your-Baby-Potential/dp/0757001955 on 11-12-2015.

Lennard J.Davis 1997 The Disability Studies Reader Newyork & LondonRoutledge. https://books.google.co.in/books?id=E8HePGDx7XsC&printsec=frontcover&dq=The+disability+studies+reader&hl=en&sa=X&redir_esc=y#v=onepage&q=The%20disability%20studies%20reader&f=false Retrieved on 10-12-2015.

Lickliter R. (2000 Dec).*The role of sensory stimulation in peri-natal development: insights from comparative research for care of the high-risk infant.J. Dev Behav Pediatr*. www.ncbi.nlm.nih.gov/pubmed/11132796. 21(6): Retrieved on 18-10-2015.

Ralph T. H. Griffith1896 The Hymns of the Rigveda.Retrieved on 13-09-2015 from http://amazon.com/The-Rig-Veda-Ralph-T-H-Griffith-ebook/dp/B001VEI

Mak Adam Daulatzai (2011).*Role of Sensory Stimulation in Amelioration of Obstructive Sleep Apnea. Sleep Disorders.*Article ID 596879. Abstract retrieved from http://theneuronetwork.com/profile/MakAdamDaulatzai on 118-10-2015.

www.schoollibraryjournal.com

Sri Swami Sivananda (1999).*Mind Control - facts about mind, sense control* (6th Ed.) Shivanandanagar U.P.India: A divine life society publication. Retrievedfrom: http://www.shivanandadlshq.org/ .

www.tamilar.org - Tamil - A Living Classical Language.
http://www.tamilculturewaterloo.org/classicallanguage.htm
The modern Library NewYork.Retrieved on 18-10-2015from www.amazon.in/The-Story-My-Life-Restored/dp/0812968867.

Uvnäs-Moberg K,Widström AM, Marchini G, Winberg J. 1987 *Release of GI hormones in mother and infant by sensory stimulation.*Retrieved from PMID: 3321889. [Pub Med - indexed for MEDLINE]. Department of Pharmacology, Karolinska Institutet, Stockholm, Sweden on 13-09-2015.

www.zerotothree.org.